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ABSTRACT

This project was funded under ESEA Title III and four subcontracts with Research for Better Schools. The Title III aspect of the project focused on curriculum change in the fields of language arts, social sciences, and teacher training. Complete reports on each of the following have been included: 1) the Social Studies Pilot Programs as described in SO 000 112 and SO 000 113; 2) implementation of the Language Arts Pilot --Nebraska Curriculum; 3) in-service micro-teaching and interaction analysis (using modifications of: the Stanford program, Mini-Course I developed by the Far West Regional Laboratories, and the Flanders System); 4) fourteen in-service programs in defining, selecting, and writing behavioral objectives; 5) curriculum materials acquisition, the SPEEDIER library, and a survey of the library services in local schools; 6) individualized instruction through the use of Learning Activity Packets; 7) the SPEEDIER Model Management System adapted from the Program Evaluation Review Technique (PERT) and the Critical Path Method Management (CPM) Systems; 8) the College Advisory Committee and consultant services; 9) publications and audiovisual reports; 10) the summer workshop series independent of pilot programs; and, 11) general project information and evaluation. Related documents are: SO 000 112 and SO 000 113. (SBE)

PEEDIER PROJECT
research
planning
implementation
101 WEST CHERRY STREET
PALMYRA, PENNSYLVANIA 17078
PHONE 717 838-9611

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THIRD ANNUAL REPORT
1969-1970

Project #OEG-3-7-703596-4396
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CURRICULUM RESEARCH AND DEVELOPMENT COUNCIL SERVING DAUPHIN, LANCASTER, LEBANON, AND YORK COUNTIES IN PENNSYLVANIA IN LANGUAGE ARTS, SOCIAL SCIENCES, AND TEACHER TRAINING.

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SPEEDIER PROJECT

THIRD ANNUAL REPORT
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TITLE III P.L. 89-10

Submitted by

SPEEDIER Project
101 West Cherry Street
Palmyra, Pennsylvania 17078

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Section A

Introduction

INTRODUCTION

Calendar year 1969 has proven that an organization such as SPEEDIER, competently staffed and adequately financed, can bring significant changes to education. The changes come by better utilization of materials and improved teaching strategies by the classroom teacher. Ultimately SPEEDIER may also produce total school reorganization.

The SPEEDIER Project is now in its third year of funding by Title III of the Elementary and Secondary Education Act, (P.L. 89-10). There are four subcontracts with Research for Better Schools. (A complete report of these contracts is listed elsewhere in this report.) Contractual contributions from local school districts helped to finance the project during 1969.

The Board of Directors, composed of the chief school administrators of the educational organization of the four counties, meets periodically to establish policy. The officers of the Board meet frequently to supply direct guidance to the organization. The executive director is responsible for day-to-day activities, development of long-range plans, and implementation and fulfillment of those plans.

The Title III aspect of the project focuses upon curriculum change in the fields of language arts, social sciences and teacher training. Complete reports on each of these activities appear in the report under the section with their respective headings.

Under the modified form of the original proposal of Title III the SPEEDIER Project was to receive $300,000.00 for the fiscal year 1969. Since Pennsylvania received significantly less money in 1969 from the U.S. Office of Education, SPEEDIER's funds were cut to $200,000.00. A number of options were open to the Project at the time. The most practical plan was to eliminate those projects which would give the least short-range involvement and still enable the project to function as near the original plan as possible. Thus, in July of 1969, the learning activity package with emphasis upon individualized instruction was temporarily deleted from the Project. The extensive searching activities of the Project were modified. The major planning functions of the organization are now carried on through funds from Research for Better Schools.

Thus, the major focus for Title III for the SPEEDIER Project in 1969 was implementing activities proven in 1968. Emphasis was placed upon total elementary schools with all staff members receiving on-site training.

You are encouraged to read this report with a number of factors in mind. First, that each activity will eventually go through five distinct phases. Phase one is climatizing for change. Phase two is establishing the team that will accomplish the objectives of the school district. Phase three is piloting with the interested and concerned teachers in a locale. Phase four will be broadening the pilot into full school building or school buildings. Phase five will be to institutionalize the project in total school districts. The linking agency concept is key to the reporting here - an agency committed to the securing from various knowledge sources the most recent, exciting innovations in education from such places as area colleges, educational television centers, department of public instruction centers, Title IV centers with emphasis on Research for Better Schools, other Title III centers with emphasis upon such places as R.I.S.E., Professional Associations, etc. Observe this retrieved knowledge being translated through a research organization, a planning organization and finally implementing the knowledge in the local public, private and Catholic schools via the model previously mentioned. A third basic assumption is a continuing process - the building within the local school district of those skills that eventually establish change as a normal activity within the local school building or school district, and that continually evolve more complex and more complete educational organizations.

The project on social sciences mentions such names as Fenton, Senesh, Greater Cleveland, Minnesota, Taba and the project on language arts mentions Nebraska, Oregon or Wisconsin. Bear in mind that the SPEEDIER Project has not been interested only in the <u>materials</u> of these projects but such <u>strategies</u> as inquiry instruction, concept formation, data interpretation, feeling interpretation, generalization, hypothesis testing and education to be most valuable.

SPEEDIER can point to 1967 as a year of organization; 1968 as a year of determining on a small scale those things which could be accomplished on a larger scale; 1969 as the year that more than 600 teachers in the schools of the four counties utilized new approaches to learning which were mostly unheard-of three years ago.

If adequate financing is secured, 1970 will be pointed to as the year when several thousand teachers will have taken the first steps towards supplying the viable curriculum necessary for education in the next decade.

Section B

Social Studies Pilots

SOCIAL STUDIES PILOTS -- 1968-1969

Introduction

The SPEEDIER Project (Curriculum Study Research and Development Council of South Central Pennsylvania) is a curriculum project funded under the Elementary Secondary Education Act, Title III. Its activities emphasize the implementation of new curriculum ideas in the schools which the project serves. Its primary purposes are:

1. To improve social studies classroom instruction
2. To improve language arts classroom instruction
3. To produce positive change in teacher classroom behavior.

The Project serves the school systems of the four south central Pennsylvania counties of Dauphin, Lancaster, Lebanon, and York. Fifty-two public and private school systems are involved. The Board of Directors of the Project is composed of chief school administrators from the participating districts.

The Project staff that functioned during the school year 1968-69 included eleven full-time professionals and five full-time non-professional employees. The staff organization was as follows:

Executive Director
Curriculum or Planning Staff
    Social Science Specialist
    Language Arts Specialist
    Group Dynamics Specialist
    Director of Research
Research Staff
    Director of Research
    Research Librarian
    Research Specialist
Implementation Staff (three curriculum consultants)
Media Specialist

The staff members involved directly in the social studies pilots and their primary responsibilities were:

Social Science Specialist
- Reviewed social studies programs for piloting
- Was primarily responsible for pilot model, priorities, and procedures
- Coordinated all social studies activities

Research Staff
- Searched for all needed information
- Assessed pilot programs
- Monitored pilot activities
- Supplied miscellaneous support activities

Implementation Staff
- Two of the three men worked directly with pilot teachers as consultants and monitors of pilot implementation

Media Specialist
- Provided general support activities including the use of audio-visual equipment.

The social studies component of SPEEDIER is involved in three general types of activities:

Full-year pilots
Shorter term implementation projects
Consultant services.

This report is limited to the full-year pilot activities for the first full operational year, 1968-69.

Purposes of the Pilots

The social studies pilot programs were selected as vehicles to introduce into the schools served by SPEEDIER the most recent thinking in social studies curriculum. Emphasis was placed on new organizations of content, new teaching strategies, and new materials. The programs contain components that SPEEDIER personnel consider significant improvements over the social studies generally taught in the area, but the unqualified adoption of any of the programs was not one of the pilot objectives. The SPEEDIER Project staff expected the pilot endeavor to affect education in the four counties in the following ways:

1. Improve social studies instruction as evaluated by participating teachers, district administrators, SPEEDIER staff, and outside social studies experts.

2. Improve teacher classroom behavior as evaluated by the teachers, their administrators, the SPEEDIER staff, and outside social studies experts.

3. Increase local educator understanding of the newer content, ideas, and teaching approaches contained in the pilot program.

4. Develop teacher skills in the use of new teaching strategies.

5. Develop educator skills in curriculum experimentation.

6. Develop a positive attitude toward curriculum experimentation and change on the part of the educators.

7. Increase educator knowledge about curriculum and curriculum change so they are better prepared to improve the curriculum of their own school system.

8. Modify district procedures and policies to make them more appropriate for handling and promoting change.

General Assumptions

Some general assumptions on which the pilots were based are:

1. Social studies instructions in the four counties has not kept pace with the newest thinking in social studies education.

2. Most teachers and administrators in the area cannot make optimal use of the most recent thinking without help from outside their district.

3. The writing of a new social studies program by the school systems individually or co-operatively is not practical.

4. A series of theoretical presentations to teachers on new social studies topics would not alone produce significant change in the classroom.

5. One or two-day in-service programs would be similarily ineffective.

6. Materials that require new approaches to handling content and new teaching strategies in social studies are now available for classroom use.

7. These materials can be used as vehicles for up-dating social studies curriculum contents, teaching strategies, and administrative procedures.

8. An efficient way to produce change in the classroom is to provide the opportunity for teachers and administrators to work with new programs and to provide enough consultant service to make the experience as profitable and as pleasant as possible.

9. Even though pilot programs may be rated very highly by social studies experts and may have been found to be valuable by other school districts, only local school personnel can determine if the program serves their own objectives and fits into their own school setting.

10. By piloting the programs in their own schools, local teachers and administrators will be able to make a valid assessment of the programs in terms of their own priorities.

11. Through the use of pilot materials, school district policies and perceptions will be modified gradually and will become more appropriate for the promoting of needed change.

12. Even if a district decides not to continue to use a particular pilot program, the experience of trying it for one year will help improve its existing social studies program, its teacher classroom strategies, and its district policies concerning curriculum innovation.

13. After a period of cooperative curriculum experimentation with SPEEDIER, local school districts will be able to conduct their own pilots and to continue curriculum revision.

Pilot Programs

The five social studies pilot programs used were:

Program	Grade level for which materials were designed	Grade levels in pilot
Fenton Social Science Program (Holt, Rinehart and Winston)	9 - 10	9 - 12
Greater Cleveland Social Science Program	1 - 9	1 - 8
University of Minnesota Project Social Studies Program	1 - 6	1 - 5
Taba Social Studies Curriculum	1 - 6	1,2,3,5,6
Senesh Social Science Program (Science Research Associates--"Our Working World")	1 - 3	1 - 3

The programs were selected for use as pilots because they have been recommended highly by experts in the field of social studies education, because they incorporate principles and ideas which SPEEDIER staff members believe represent the future trends in social studies education, because they have a rationale consistent with the policies of the local school districts, because they are developed to the extent that teacher work in preparing or searching for materials is at a minimum, because they involve teaching strategies different from those usually used in the classrooms of the area, because they require changes in teacher classroom behavior, and because they seem to be appropriate vehicles for producing significant positive change in a variety of instructional components of the school systems served by SPEEDIER.

The Pilot Model

The pilot model that was used contains five phases.

Phase I - Climatizing

The climatizing phase of the pilot involves an analysis of local school districts by the SPEEDIER staff in an effort to determine the types of pilot programs that would be most valuable to them at their present stage of development. Once this is decided upon, the SPEEDIER staff attempts to cultivate within the districts a positive attitude toward curriculum change and a willingness to undertake the piloting of some new social studies program. Staff members meet with social studies teachers and administrators in formal and informal settings. They discuss needs for change, possible directions, and ways in which SPEEDIER can help.

Phase II - Selection of Program and Establishment of Pilot

While the possibility of change is being discussed with the local school districts, SPEEDIER staff members review recent information concerning new social studies curriculum development projects. They select those specific programs that social studies experts rate highly, that seem to fit the needs of the local schools, and that appear to be appropriate vehicles to produce significant change in the schools. They describe these programs to the administrators of the school districts that indicate an interest in the possibility of pilot participation. The administrators then decide if their district will participate, to what degree they will participate, and which program or programs they will use.

Phase III - Pilot Operation--First Year

This phase of the pilot contains three stages:

A. Background preparation for the pilot, including the establishment of pilot procedures and scheduling

B. The introductory workshop, usually of three to five days duration

C. Pilot implementation, including classroom use of the program and periodic school-year workshops.

When an administrator agrees to have his district participate, an agreement is written between SPEEDIER and the district, specifying the roles of both parties. The district then selects

teachers to participate. These teachers attend training sessions and workshops, some of which are scheduled prior to the start of the program (usually in August). Others are held at various times during the school year. The actual scheduling of the meetings during the year is based on the performance and progress of the teachers. Most workshop sessions are conducted for a full day of five and one-half or six hours or as two sessions of two and one-half to three hours.

As the teachers use the program during the year, a SPEEDIER implementation staff member visits their classes, observes their teaching, and consults with them.

In the implementation part of this phase, four different points of emphasis are pursued in a rough sequential pattern.

1. The introduction of pilot materials and the development of teacher familiarity with them

   This usually involves the first six to eight weeks of the pilot.

2. Refinement of teaching techniques in the use of the materials

   The implementation staff member consults with the teachers on an individual basis. Although this stage is emphasized primarily during the third and fourth month of the pilot, there is an effort to maintain the emphasis through the rest of the school year.

3. Dissemination of information about the pilot program to other teachers within the piloting district and to other districts who are not working with this particular pilot program

4. Critical evaluation of the program and the determination by the district of plans for future use

Phase IV - Pilot Operation--Second Year

Districts that decide to expand the program add more teachers to the pilot, usually at additional grade levels. SPEEDIER continues to work with the new teachers in arrangements similar to the first year, and the consultant continues to visit

Company. The total Fenton Program consists of seven courses designed to be taught in a sequential manner in grades 9 through 12. The courses at each grade level are as follows:

Grade 9
- Comparative Political System
- Comparative Economic System

Grade 10
- The Shaping of Western Society
- Tradition and Change in Four Societies

Grade 11
- American History

Grade 12
- Introduction to the Behavioral Sciences
- Humanities in Three Cities

The components of the program taught in the pilot include only the first four of the seven courses. The other materials were not available when the pilot began.

A total of fifteen teachers in nine school districts were involved in the pilot. A breakdown by district, grade level, and number of teachers and students is reported on Table I.

The Fenton Program combines objectives in four major areas: inquiry skills, knowledge, attitudes, and values. Heavy emphasis is placed on student use of inquiry skills, based on a six step process described by Fenton as "a mode of inquiry." The knowledge or information taught in the program centers around "analytical concepts" drawn from the social sciences. The value objectives are pursued through a method of teaching that involves the analysis of value conflicts by students under teacher direction. The general process for this component of the program is similar to that developed by Donald W. Oliver and his co-workers in the Harvard Social Studies Project. Specific content covered is that which fits the inquiry, conceptual, and value objectives.

TABLE I

Districts Involved in Fenton Program

Districts	Grade Level	Courses Taught*	Number of Sections	Number of Teachers	Number of Pupils
Central Dauphin	9	Eco./Pol. Systems	2	1	73
Central York	10	Western Soc./Four Soc.	4	2	111
Donegal	12	Eco./Pol. Systems	4	1	122
Eastern York	11	Eco./Pol. Systems	2	1	58
Hempfield**	12	Eco./Pol. Systems	2	2	70
Lebanon Catholic***	12	Economic Systems	4	1	145
Palmyra	9	Eco./Pol. Systems	2	2	60
	11	Economic Systems	2	1	66
Spring Grove Area	10	Western Soc./Four Soc.	2	1	40
	12	Eco./Pol. Systems	2	1	60
Lampeter-Strasburg	12	Eco./Pol. Systems	3	2	91
			29	15	896

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* "Western Soc./Four Soc." represents Shaping of Western Society and Tradition and Change in Four Societies

"Eco. Sys." represents Comparative Economic Systems

"Pol. Sys." represents Comparative Political Systems

** These teachers were added after the pilot started. They did not attend the initial workshop sessions.

*** Only 2nd semester

Pilot Preparation

The Fenton pilot effort began in early spring 1968 with an analysis by Dr. Charles B. Myers of the nature of the new social studies curriculum projects for secondary schools. Dr. Myers and Dr. Thomas S. Hamill discussed the latest reports from project centers throughout the country and decided that the Fenton Program would be most appropriate for SPEEDIER to offer to its participating districts as material for their initial pilot. Criteria used in the selection were: the rationale and assumptions of the project, the availability of the materials, the assessed stage of development of the schools in the area, and the willingness on the part of the teachers in the area to accept certain new types of materials and teaching ideas.

On May 15, 1968, a conference was held at which Mitchell P. Lichtenberg of the Social Studies Curriculum Development Center at Carnegie-Mellon University explained the nature of the Fenton Social Studies Program to approximately 90 educators from the districts served by SPEEDIER. Following that meeting, George M. Baer, Curriculum Specialist, and the only SPEEDIER staff member who had joined Dr. Hamill on a full-time basis by that time, contacted all educators who indicated on the conference evaluation form that they wanted more information. Mr. Baer discussed the nature of the Fenton Program in more detail and described the kinds of activities that would be involved in the pilot. Eight school districts indicated they were interested in participating. (A ninth district that began using the Fenton Program on its own decided to affiliate with the SPEEDIER pilot later.)

Mr. Baer and the chief school administrators in the eight districts developed plans for the pilot during the academic year 1968-1969. The administrators selected the teachers and the grade levels that were to be involved in the pilot. The basis for their selection varied. Some of the teachers chosen had indicated dissatisfaction with their current social studies program; others expressed an interest in working with something new, some specifically mentioned the Fenton Program. In a few situations the choice of participating teachers was almost an arbitrary selection that can be described only as the personal choice of the administrator. After Mr. Baer and the school administrator agreed on the process for purchasing materials and other administrative details, an agreement between the school district and SPEEDIER, which specified the responsibilities of each party, was drawn up and signed.

Introductory Workshop

On August 26-29, thirteen teachers who were selected to work with the Fenton pilot attended a four-day workshop. (Two other teachers were added later.) During these four days the nature of the SPEEDIER Project, the purposes and activities of the pilot, and the nature of the Fenton Social Studies Program were explained. During the first day, Lewis N. Shaten, social studies teacher and department chairman at Elkins Park Junior High School, Cheltenham (Pennsylvania) School District, demonstrated one of the Fenton lessons. Following the demonstration, the teachers analyzed Mr. Shaten's presentation and discussed in detail the techniques and strategies involved in inquiry teaching as suggested in the Fenton Program. On the second day a similar discussion and analysis was pursued, based on a film of Dr. Fenton teaching a group of high school students.

On the third day, Dr. Kendrick McCall of the SPEEDIER staff introduced the teachers to a modified form of the Flanders Interaction Analysis System. The teachers then worked with the system in analyzing the video-tape of the lesson given two days earlier and the Fenton film. On the fourth day, one of the teachers of the group prepared a lesson and taught it to the others. The presentation was replayed on video-tape and analyzed by all of the participants.

Pilot Implementation -- George M. Baer, Implementation Director

Introduction of Materials

Many of the teachers began to use the Fenton materials at the start of the school year in September as was planned. A few had to delay the beginning of the pilot because the Holt, Rinehart and Winston Company was late in supplying materials to the districts. All of the schools did have the pilot under way before the end of September. In the cases where there was a delay, teachers taught some of the material they had used the previous year or taught about the up-coming presidential election. A few worked with experimental units that were developed a year earlier by Holt as samples.

From the beginning of the work with students in the classroom until November 13, when the first follow-up workshop was held, the teachers concentrated on becoming familiar with the program, establishing a pattern in working with it, and helping students adjust to the new learning climate.

On November 13, the teachers met with Mr. Baer, Dr. Myers, and Dr. McCall. They reported some of the problems involved in the implementation process, emphasizing some administrative and procedural difficulties. Time was also devoted to discussions of specific experiences of the teachers and of the modifications they had made in the teaching strategies outlined in the teaching guide. They reported on the results of their teaching of the lessons as designed and on the modifications they had undertaken. Concern was voiced for a closer analysis of the questioning technique involved in Fenton's directed discussion. This topic had been planned for the session but, because the teachers chose to devote more time to sharing and analyzing their own teaching experiences, it was postponed until the following meeting.

Refinement of Teaching Techniques

After the November 13 meeting, the teachers concentrated on refining their teaching skills in directed discussion, inquiry, and value clarification as called for in the Fenton Program. Classroom observations by Mr. Baer provided feedback for teacher self-analysis.

A workshop on February 7 focused on the teaching techniques of the Fenton Program. The teachers discussed the weaknesses and strengths of the materials based on their experiences to that date. They described classroom techniques they had found valuable, reported on student reaction to the program, and suggested ways in which the material could be adapted to meet even better the needs of their particular students. They analyzed a demonstration film of a value clarification lesson taught by Fenton and listened to a presentation on the Bloom taxonomy of cognitive skill objectives. Each teacher was also given a copy of Norris Sanders' Classroom Questions: What Kind?[1] for use in analyzing his own classroom questioning technique. Mr. Baer discussed the Sanders' book with individual teachers during his subsequent visits.

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[1] Norris Sanders, Classroom Questions: What Kind? (Harper and Row: New York, New York).

Dr. McCall met with each teacher individually during the meeting to compare the results of the analysis of the audio-tape recording of one of his classes with the self-perception inventory administered at the start of the program. The teachers drew their own conclusions from the comparison and matched them with the strategies suggested by the Fenton Program.

Dissemination

Arrangements for the dissemination of information for all the pilots began in early February. Pilot teachers and their principals were asked to select one day a week when visitors from the other school districts in the four counties could observe the pilot classes. This information was sent to all chief school administrators with an explanation of the procedure by which visits could be arranged. Visits began February 17 and continued until March 8. The purpose of the visits was to enable non-pilot educators to see the programs being taught and to talk with the pilot teacher so they could determine for themselves the degree to which they would be involved in pilots the following year.

In addition to the in-class observation, pilot information sessions were scheduled, where pilot objectives and procedures plus the nature of each of the five pilot programs were explained. Some videotapes were also preserved, with the approval of the teachers, for viewing by school representatives contemplating adding pilots.

Critical Evaluation

The final phase of the pilot began in March and consisted of a critical analysis of the program, its materials, and its teaching strategies. Its purpose was to enable districts to determine their future course of action. A workshop held on May 5 concentrated on this analysis. Original plans called for the use of the Curriculum Analysis System developed by the Social Science Education Consortium; but, because of the limited amount of time and the limited degree of sophistication of the teachers and districts, the plans were modified. As a result the analysis involved a review by the teachers of the Fenton Program and of their use of it and a decision by each of them if they wanted to continue using it and if they wanted to recommend expanded use in their district.

Of the fifteen teachers who worked in the Fenton Program, thirteen planned to continue using it as a central part of their social studies classes the following year. One of the two teachers who chose to return to more traditional social studies was teaching Comparative Economic Systems to average and below average eleventh-grade students. He felt that his students were unable to handle Comparative Economic Systems because of their limited reading abilities and because of their general unwillingness to participate in class discussion. He did plan, however, to keep the Fenton materials and to use certain sections as supplements on a unit basis.

The second teacher who chose not to work with the program had taught Comparative Economic Systems and Comparative Political Systems in grade nine. As his reason for not continuing, he stated that the Fenton Program did not match his teaching style. He also indicated a desire to keep the Fenton materials for use as supplements to his more traditional social studies. However, his district chose to give the materials to another teacher who had indicated interest in using them in the 1969-1970 school year.

Of the thirteen teachers who had planned to continue using the program during the 1969-1970 school year, three changed teaching positions during the summer. Of the ten remaining teachers, most added more classes to the program, but all expressed a desire to modify the program by deleting some lessons, changing others, and adding some other material of their own choosing.

Two of the districts using the material added new teachers to the pilot. Spring Grove added three teachers, one as a replacement for a teacher who left the system and two who began using the newer materials for grades eleven and twelve. Lampeter-Strasburg added a teacher for the tenth grade materials to the two who were using the ninth-grade courses. Two other districts selected new teachers as replacements, one replaced a teacher who had left the system and the other replaced one of the teachers who chose not to continue with the program. In both cases, the districts chose to handle the implementation without direct contact with SPEEDIER, but both teachers have since asked for SPEEDIER aid.[2]

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2 Because of the nationwide cut in federal Title III funds for the 1969-1970 school year, SPEEDIER began charging each district $50 per teacher for pilot participation. The charge represents about one-fourth of SPEEDIER's cost for pilot operation. The charge was a factor in the district's decisions. One of the districts has since reversed its decision, and its new teacher is beginning to work in the pilot for 1969-1970.

ELEMENTARY PILOT ACTIVITIES

Programs developed by four separate social studies curriculum projects were used in eighteen school districts by fifty-seven participating teachers. Grades one through nine were included. A breakdown by district, grade level, number of teachers, and number of students is reported on Table II.

The programs used were:

1. the Taba Social Studies Curriculum
2. the University of Minnesota Project Social Studies Program
3. the Greater Cleveland Social Science Program
4. the Senesh Social Science Program, published by SRA.

A fifth program entitled Man, A Course of Study, developed by the Education Development Center, was also selected for use but had to be dropped for 1968-69 because the materials were not available for piloting because SPEEDIER became operative after the in-service training workshops had been scheduled by EDC. At that time, EDC did not permit in-service training by anyone other than a person who had been trained by their own staff and through their own program.

Taba Program

The Taba Social Studies Curriculum was originally developed under the direction of Dr. Hilda Taba in conjunction with the Contra Costa County, California, Schools. Later, Dr. Taba received a grant from the Cooperative Research Branch of the United States Office of Education to continue and expand the development of the curriculum. The funded project was entitled "Development of a Comprehensive Curriculum Model for Social Studies, Grades 1 Through 8, Inclusive of Procedures for Implementation and Dissemination." After Dr. Taba's death, the project was continued by Norman E. Wallen, Mary C. Durkin, and Jack R. Fraenkel.

The curriculum includes materials for grades one through eight and is designed to enable students to acquire thinking skills, key concepts and major generalizations, selected attitudes, and academic and social skills. Heavy emphasis is placed on thinking skills,

TABLE II

Districts Involved in Elementary Pilots

District	Grade Level	Number of Teachers	Number of Pupils
TABA			
Annville-Cleona	6	2	57
Donegal	1	1	22
	5	2	54
Ephrata	1	1	24
Hempfield	3	2	56
Lampeter-Strasburg	1	2	49
	2	2	52
	5	2	50
Lancaster City	3	2	42
Spring Grove Area	6	1	31
		17	437
MINNESOTA			
Annville-Cleona	5	2	54
Cocalico	1	1	25
	2	1	29
	3	1	21
	4	1	33
Derry Township	1	2	42
Donegal	1	2	63
Palmyra	3	2	54
	4	2	58
Spring Grove Area	5	1	29
		15	408

TABLE II (continued)

District	Grade Level	Number of Teachers	Number of Pupils
GREATER CLEVELAND			
Derry Township	1	2	43
Eastern Lebanon County	2	2	60
	4	2	46
	8	1	88
Northeastern	5	2	63
	6	2	67
	7	1	104
Solanco	3	3	77
Spring Grove Area	4	1	25
		16	573
SENESH			
Central Dauphin	1	1	28
	2	1	30
	3	1	29
Hempfield	2	1	31
Lancaster Township	2	1	20
Spring Grove Area	1	1	28
Susquehanna Township	2	3	68
		9	234
TOTAL OF ALL ELEMENTARY PILOTS		57	1652

which are separated into four thinking tasks: concept formation, interpretation of data, application of generalizations, and interpretation of feelings and attitudes. The program incorporates concepts and generalizations from the different social sciences in an integrated fashion. Selected concepts provide continuity by serving as strands through all eight years of the program and major generalizations provide the organizing themes for each unit.

The curriculum requires a concentrated in-service program, the model for which was developed by the Taba Curriculum Center and the Institute for Staff Development. A greatly modified and shortened form of that model was used in the pilot.

The topics covered at each grade level of the program are as follows:

Grade 1: The Family
Grade 2: The Community
Grade 3: A Study of Comparative Communities
Grade 4: California - Yesterday and Today
Grade 5: A History of the United States and Its Relationships with Canada
Grade 6: Selected Ways of Life in Latin America
Grade 7: Key Elements in the Growth and Development of Western Civilization
Grade 8: The Growth of the American Nation

During 1968-69, SPEEDIER worked with grades 1, 2, 3, 5, and 6.

Materials used in the pilot include Teaching Guides and a Teacher's Handbook for Elementary Social Studies written by Dr. Taba, which describes some of the theory behind the program. Because of the shortening of the in-service training from that suggested in the model developed by the Institute for Staff Development, manuals for teacher use on each of the four thinking tasks were not used. The teaching guides call for the use of a variety of reading and audio-visual materials for students. These were ordered by SPEEDIER and provided to the participating teachers. In most cases, two pilot teachers shared one set of materials. There is no common text.

Minnesota Program

The University of Minnesota Project Social Studies Program was developed by Dr. Edith West under a grant from the Cooperative Research Branch of the United States Office of Education. The project was entitled "Preparation and Evaluation of Curriculum Guides and Sample Pupil Materials for Social Studies in Grades K-14." However, materials were only developed for grades K-12.

The program centers on culture as its main theme, and is an interdisciplinary social studies program sequentially developed around key concepts, generalizations, skills, and attitudinal behaviors. Unit by unit and grade by grade continuity is stressed. The content taught at each grade level is as follows:

Grade 1: Families Around the World
Grade 2: Families Around the World
Grade 3: Communities Around the World
Grade 4: Communities Around the World
Grade 5: Regional Studies
Grade 6: The Formation of American Society
Grade 7: Man and Society
Grade 8: Our Political System
Grade 9: Our Economic System and Socio-Economic Problems
Grade 10: American History--Development of American Civilization
Grade 11: Area Studies
Grade 12: Value Conflicts and Policy Decisions

SPEEDIER pilots for 1968-1969 used the materials for grades one through five.

Materials for the Minnesota Program include teacher resource units plus a few mimeographed student materials. The major portion of the student materials used in the program are a variety of reading and audio-visual components listed in the teaching guides. SPEEDIER provided the resource units to the teachers, who then selected the activities that they felt were most appropriate for their own class. It also supplied sets of student materials to the piloting teachers, who in most cases shared them with one other person working at the same grade level in the same building. The arrangement was similar to that employed with the Taba teachers. Valuable assistance in selecting and securing needed student materials was provided by Charles L. Mitsakos, social studies curriculum coordinator, Chelmsford, Massachusetts.

Greater Cleveland Program

The Greater Cleveland Social Science Program was developed by the Educational Research Council of Greater Cleveland, now the Educational Research Council of America. The Council began operation in 1959 with the purpose of improving elementary and secondary school curricula in northeast Ohio. It began work on social studies in 1961. To date, it has produced revised social studies curriculum materials for grades one through nine. The program involves teaching concepts rather than facts, integrated learning of concepts selected from the different social science disciplines, and cumulative learning by which instruction at each grade level is built carefully upon that of the preceding grades.

The materials include teaching guides and student textbooks for each unit. There are more than sixty different student texts for grades K through 9.

The instruction topics for each grade level are as follows:

Kindergarten:	Learning About the World; Children in Other Lands
Grade 1:	Our Country; Explorers and Discoverers
Grade 2:	Communities at Home and Abroad
Grade 3:	The Making of Anglo-America; The Metropolitan Community
Grade 4:	The Story of Agriculture; The Story of Industry; India
Grade 5:	The Human Adventure, Parts I, II, III, and IV; The Middle East
Grade 6:	The Human Adventure, Parts V, VI, VII, and VIII; Latin America
Grade 7:	The Challenges of Our Time, Parts I, II, III, and IV; Principles of Geography; Africa
Grade 8:	Six Generations of Americans; North America and the Caribbean
Grade 9:	The Price of Freedom; Western and Eastern Europe

In 1968-1969, SPEEDIER piloted the program in grades one through eight.

Senesh Program

The Senesh Program was developed originally as part of the Elkhart, Indiana Experiment in Economic Education under the directorship of Dr. Lawrence Senesh. It is based on the principle that social studies facts can be understandable if fundamental problems or principles that underly these facts can be taught to the students. The program itself emphasizes "why" questions that students raise concerning the social studies material they study. It is heavily based on principles of economics although other social science disciplines are included.

Dr. Senesh is planning the program for grades one through six, but to the present time, only materials for grades 1, 2, and 3 have been completed. These are published by Science Research Associates. The topics taught in each grade are:

Grade 1: Families at Work
Grade 2: Neighbors at Work
Grade 3: Cities at Work

The materials used for the program include a student text, an activity book for students, and a teacher's resource guide. A set of records is also available for grades 1 and 2. SPEEDIER piloted the material at all three primary grades.

Pilot Preparation

During the summer of 1968, members of the SPEEDIER staff reviewed reports of different curriculum development projects in social studies in an effort to identify the programs which would be most valuable and most appropriate for use by the elementary schools in our area. Dr. Charles B. Myers, Dr. Thomas S. Hamill, Geroge M. Baer, and William R. Thomas all participated in the endeavor with the assistance of Research Librarian, Caroline Sixsmith. Some of the criteria used to determine which project materials would be selected for use were: the rationale and assumptions of the project, the availability of the materials, the assessed stage of development of the schools in the area, and the willingness on the part of the teachers of the area to accept certain new types of materials and teaching ideas.

As soon as the five social studies programs were identified, a short description of them was sent to all chief school administrators of the SPEEDIER area. The administrators who were interested in more information on any one or all of the programs were asked to respond on an enclosed postcard. Where there was a positive response, a member of the SPEEDIER staff visited the school administrator, and in most cases some of his staff, and described the programs in as much detail as possible. Descriptive printed material was also given to the people at that time.

After the administrators were able to analyze the information, they were asked to make a choice of pilot or pilots they would like to pursue. SPEEDIER suggested that at least two teachers teaching the same materials at the same grade level in the same school be selected so they would be able to communicate with and assist each other. It was also hoped that there would be enough teachers involved to assess the program adequately, but not so many that the district would be committed to a program before its own people had an opportunity for a thorough analysis. SPEEDIER did not want the school districts to be bound to a particular set of materials until the district staffs were able to conclude what the materials could and could not do.

August 22, 1968, was set as the deadline by which all chief school administrators were to have decided their course of action; but many administrators were not able to make a decision by that time, causing a delay in the original plan. It was about September 10, before most districts had made a choice.

Eventually eighteen different districts did choose to pilot one or more of the elementary programs. As was the case in the Fenton program, as soon as this decision was made, SPEEDIER staff members wrote agreements with the individual districts to define the exact commitments SPEEDIER and the districts were making for the academic year.

Introductory Workshop

A three-day workshop for all pilot teachers was conducted September 19-21. For the first day, all area elementary school principals, district superintendents, curriculum personnel, and additional respresentatives selected by superintendents were invited. About 150 people attended. The session consisted of general presentations on the new social studies, including trends, unique ideas, and possible directions for the school districts represented. Principal speakers were Raymond English, Program Director, Greater Cleveland Social Science Program; and Dr. Charles B. Myers. During the afternoon, separate half-hour presentations on each of the four pilot programs were given by SPEEDIER staff members. Approximately thirty-five people attended each on a sequential basis so that every person had an opportunity to attend all four sessions and to ask questions concerning each program.

The meetings on the following two days were designed as training sessions and were restricted to the fifty-seven teachers who were to be involved in the pilots. The sessions were conducted jointly by SPEEDIER staff members and outside consultants who had been working with the various programs. For the Greater Cleveland Program, Miss Delores Beck from the Educational Research Council of Greater Cleveland worked with William R. Thomas. For the Minnesota Program, Charles L. Mitsakos, Social Studies Curriculum Coordinator for Chelmsford, Massachusetts, worked with Dr. Charles B. Myers. For the Taba Program, Basil Kakavas, coordinator of the implementation program for the Taba curriculum in Park Forest, Illinois, worked with George M. Baer and Dr. Kendrick M. McCall. For the Senesh Program, Donald Markle, the SRA area representative, and Mrs. Patricia Saxton, a teacher from the neighboring school district of East Pennsboro, worked with Robert Eshelman. During the two days, all four programs were explained in detail and demonstrated. Much time was devoted to actual practice with the materials by the teachers.

Pilot Implementation

Introduction of Materials

The introduction of materials for all four elementary pilots followed the same general pattern, but the nature of the programs and the availability of materials at the start of the year did dictate some variations in the procedure used for each pilot. In general, the materials were ordered by SPEEDIER, organized by SPEEDIER if necessary, and given to the teachers. After the teachers began working with the materials in the classroom, they met individually with the implementation director assigned by SPEEDIER to their program. For six weeks to two months after the teachers began using the program in the classroom, the consultant concentrated on helping them become familiar with the program and its materials. In most cases, this involved classroom visitations by the consultant and meetings with individual teachers. In a few cases, grade-level meetings were scheduled. The variations in handling the first part of the pilot implementation for each of the four programs is described below.

Taba -- George M. Baer, Implementation Director

The implementation of the Taba Program was delayed until late October because many companion materials that had to be ordered individually by SPEEDIER did not arrive until that time. However, since the main emphasis of the Taba Program is on teaching strategies, many teachers did practice the strategies they learned in the initial workshop almost immediately, using them with their traditional content. When the materials arrived, they were organized and labeled by SPEEDIER and turned over to the teachers at a dinner meeting scheduled during the last week in October. At that meeting, the list of materials in the teaching guides were marked as "available" and "not available" for use at that time. The teachers put the materials to use within the next few days, and Mr. Baer consulted with them individually during the succeeding weeks.

The materials problem was caused by a combination of situations: the Taba curriculum employs a large variety of materials which have to be ordered from many different publishers, labeled, and packaged for teacher use; orders for these materials were placed very late because decisions to pilot elementary programs were not made by most districts until late August and early September; and a number of the items suggested in the teacher guides were no longer in print, or readily available. Because of the delay, a new procedure for handling materials orders was developed for 1969-1970, and a longer lead time for ordering was planned.

Minnesota -- William R. Thomas, Implementation Director

The pilot of the University of Minnesota Project Social Studies Program was also delayed until late October because of the need for companion materials. The problems and the steps followed in handling them were identical to those described for the Taba Program. Because the Minnesota guides emphasize the reorganization of content according to concepts and generalizations, however, teachers were less able than those in the Taba Program to begin some classroom innovation without the new material. Most teachers did begin with the pilot soon after receiving the materials during the last week in October. Mr. Thomas consulted individually with the teachers during the succeeding weeks. Materials that arrived later were distributed directly to them by Mr. Thomas.

Greater Cleveland -- William R. Thomas, Implementation Director

Immediately following the introductory workshop, the Greater Cleveland teachers began using the new materials in their classrooms. Mr. Thomas worked with the teachers individually and in small groups on a consulting basis. Although the program required changes in content and teaching strategies, most teachers adjusted quickly. The rather complete teacher's guide, the fact that the program is content oriented, and the fact that each student had a text helped make the transition easier than was the case for the Taba and Minnesota Programs.

Senesh -- Robert Eshelman and Charles Hostetler, Implementation Directors

All Senesh materials were on hand at the time of the introductory workshop, and teachers were able to begin immediately. Mr. Eshelman served as consultant to the teachers, meeting with them in their schools. Several teachers proceeded with little difficulty. Three teachers, however, who were assigned the program without their consent and who attended the Saturday workshop without compensation, avoided using the program on a consistent basis for most of the first month of the pilot. After several meetings with Mr. Eshelman, they agreed to participate more actively.

Refinement of Teaching Strategies

The refinement of teaching strategies for all four elementary pilots began approximately six weeks after the materials were introduced into the classroom. For Greater Cleveland and Senesh this occurred in late October and early November. For the Taba and Minnesota pilots it occurred in early December. A description of the activities involved in the refinement stage for each of the pilots appears below.

Taba

Because the Taba Program involves unique teaching strategies, this portion of the pilot was emphasized more than in the other programs. Although only five workshop days were originally planned, four more full-day sessions were added. Eight of the sessions were conducted by Taba specialists. At each, specific teaching strategies were explained, analyzed, and discussed. Meetings were held on December 2 and 3 under the direction of Dr. Jack Fraenkel, Associate Director of the Taba Curriculum Development Project, and on February 17 and 18 and March 20 and 21 by Basil Kakavas, the director of the introductory Taba workshop in October. At the last two sessions demonstration lessons, using first and fifth grade students, were presented and analyzed.

Mr. Baer observed the Taba classes frequently. His observations plus selective classroom use of audio and video tapings supplied the teachers with feedback information for their own self-analysis.

Minnesota

The emphasis on refining teaching strategies began with separate meetings held on December 11 and 12 for teachers of grades 1, 2, and 3; and for grades 4 and 5 respectively. Discussions centered on teacher experiences with the program to that time, the state of the materials supply, and the procedure to be followed for remaining materials orders. Many items to be used in units for the rest of the year were given to the teachers, itemized in the teaching guides, and labeled for easy teacher use.

Soon after the meeting, all the teachers began the second unit for the year, and Mr. Thomas met with them individually and in grade-level groups to discuss their plans. In these meetings, he emphasized refined use of teaching strategies called for in the guides. The nature of instructional objectives and their use in the teaching of concepts, generalizations, skills, and attitudes was discussed; and the flexible use of the resource guides was explained. Observations by Mr. Thomas and selected classroom use of audio and video tapings provided feedback for teacher self-analysis.

Greater Cleveland

As soon as individual teachers began to feel comfortable with the Greater Cleveland Program, emphasis was placed on the refinement of the teaching strategies that could be used with the program. Classroom observation by Mr. Thomas plus selected audio and video taping of classes provided feedback for teacher self-analysis. A workshop on February 7, 1969, under the direction of James Langer of the Greater Cleveland Social Science staff, focused on the goals, rationale, and conceptual organization of the Greater Cleveland Program. The teachers also discussed their experiences with the program to that date and analyzed the materials they would use during the second half of the year.

Senesh

As soon as the individual teachers adjusted to using the new materials, emphasis was placed on the refinement of teaching strategies suggested in the Senesh guide. Mr. Eshelman's class observations provided feedback for teacher self-analysis. Because a few teachers seemed quite apprehensive about the presence of a classroom observer and because of the original reluctance of some of them to use the materials consistently, Mr. Eshelman was very cautious in his suggestions. As a result, several teachers made less progress in using new teaching strategies than had been hoped. Since other Senesh teachers showed significant progress in the same period of time, however, the slow development by these teachers should not be attributed to the Senesh Program or materials.

A workshop on February 13, led by Mr. Eshelman and Dr. Myers, included a discussion of the experience the teachers had to that point, an analysis of the materials and teaching strategies of the program, and a presentation on the nature of instructional objectives and their use in teaching the Senesh Program. Dr. McCall also discussed with each teacher the results of the analysis of the audio tape of her class.

Dissemination

The dissemination activities for the elementary pilots were the same as those for the Fenton pilot. They are described in the Fenton section of this report.

Critical Evaluation

The final point of emphasis for each pilot consisted of a critical analysis of the programs, teaching strategies, and materials. In each case, this began in March. Its purpose was to enable districts to determine their course of action for the next year. Unlike in the Fenton pilot, no workshops devoted to this task were scheduled. The assessment consisted of discussions between the pilot teachers and the SPEEDIER implementation staff member assigned to the program. No specific analysis instrument was used. The possible use of the Curriculum Analysis System developed by the Social Science Education Consortium was considered, but the SPEEDIER staff felt the degree of teacher sophistication and the amount of time available for meetings made its use undesirable at that time.

Taba

The critical analysis of the teaching strategies and materials of the Taba Program began in March and overlapped the final sessions devoted to teacher training in Taba classroom strategies. Because the meetings were on teaching strategies rather than program evaluation, Mr. Baer met with the teachers individually and in small groups to make the assessment. All the teachers said they were pleased with the program even though it required time for them to adjust to the new teaching strategies, to the lack of a student text, and to the wide variety of companion materials. They indicated that the specific and rather rigid teacher's guide provided a means of security during the adjustment period.

All seventeen teachers who used the Taba strategies and materials during the year planned to continue with them in 1969-1970 and recommended that more teachers in their districts be added. (One teacher of the original eighteen had dropped out of the pilot because of illness before work in the classroom began.) However, four of the seventeen did not continue to teach in their systems the following year.

Five of the seven districts added more teachers. Hempfield expanded the pilot to include all eighteen teachers of one building; Annville-Cleona added eight teachers; Ephrata added six; Lampeter-Strasburg added four (two were replacements for people who left the system); and Spring Grove added a second teacher. The districts that did not expand cited financial problems and other internal difficulties unrelated to the pilot as reasons for not expanding at that time. The teachers who started in the pilot continued. In addition, Penn Manor School District, which did not have teachers in the pilot in 1968-1969, began a pilot for 1969-1970 that involved all twelve teachers of one building. Two other districts outside the SPEEDIER four-county area sent visitors to the pilot schools and signed special agreements for full-school pilots for 1969-1970. Wilkes-Barre Schools included eighteen teachers and Tarrytown, New York included thirteen teacher. The entire cost of these two pilots was borne by the districts.

Minnesota

The Minnesota teachers met with Mr. Thomas individually and in grade-level groups to assess the program. A full-day meeting planned for previously was not used for this purpose.

In general, the teachers felt the program was an improvement over their traditional social studies. However, they did point out that the very flexible teacher's resource guide, the lack of a common student text, and the large variety of companion materials required a period of adjustment. They also pointed out, and the SPEEDIER staff agreed, that the amount of in-service training on the newer teaching strategies employed by the program should have been greater.

Although the teaching strategies required of the Minnesota Program are, in general, less demanding than those of the Taba Program, several in-service sessions devoted directly to newer teaching strategies would have been valuable. The Minnesota teacher's guides do not describe teaching strategies in a specific enough manner for the teachers to follow without additional direction.

Thirteen of the fifteen Minnesota pilot teachers chose to continue using the program. The two who did not continue teach in Derry Township where the Greater Cleveland Program was selected for all classes on their grade level. Two districts added more teachers to the pilot for 1969-1970. Cocalico School District adopted the program for all 32 primary classes in the system (including kindergarten) and plans to add all intermediate grades in 1970-1971. Annville-Cleona School District added three more teachers at grade five.

Greater Cleveland

Mr. Thomas met with Greater Cleveland teachers individually and in small groups to help them assess the value of the program. He chose not to use a full-day workshop session that had been agreed to in the agreements with the districts.

All Greater Cleveland teachers chose to continue using the program for 1969-1970, and three of the five districts expanded the pilot considerably. Eastern Lebanon County School District extended it to include all primary grades in their system plus all fourth, fifth, and sixth grade classes in one of their six elementary schools. Northeastern School District added teachers at various levels and developed a direct relationship with the Educational Research Council for in-service work for 1969-1970. Derry Township Schools included all first and second grade teachers in their expansion.

The decision of the other two districts not to expand was not based on a negative reaction to the program. Solanco had adopted Greater Cleveland earlier and their participating teachers were new to the district and to the program in 1968-1969. For 1969-1970 they planned to handle additional in-service training on their own. Spring Grove had only one teacher in the program and chose to continue it at the same level for another year for a more thorough analysis.

Senesh

The final phase of the Senesh pilot was under the direction of Charles Hostetler, who replaced Mr. Eshelman as Senesh pilot implementation director on March 1. He worked with the Senesh teachers individually and in small groups to assess the value of the program. One meeting of all the teachers was held, but only part of it was devoted to analyzing the program.

Four of the nine teachers who used the program continued with it for the 1969-1970 year. Three chose not to continue using it, one stopped teaching, and one taught in a school that selected the Taba Program for school-wide use. One district added new pilot teachers and a second planned to do so but budget cuts postponed the expansion for 1969-1970.

In the district where the three teachers chose not to continue, other teachers were given the materials to use. In the opinion of the SPEEDIER staff, the Senesh Program itself was not responsible for the discontinued use. Problems within the system, such as the teachers not being paid for Saturday meetings, clashes of personalities, and teacher anxiety about having a classroom observer were responsible for a negative attitude toward the pilot almost from the start.

ASSESSMENT ACTIVITIES

The purposes of the Social Studies Pilots as listed on pages two and three of this report fall into three categories:

1. The improvement of social studies instruction
2. The change of teacher behavior in the classroom and in the role of curriculum innovator
3. The change of district procedure and policy toward curriculum change.

In order to help determine the success of the pilots in these areas, limited assessment procedures were used. Since the primary objective of the pilots was to introduce as many educators as possible to new social studies curriculum ideas and to a process of curriculum change, decisions were often made to add teachers and modify the research design if such modifications would expand the impact of the pilots in the schools of the area. In some cases these modifications clouded the assessment results.

To a great extent, determination of the impact of the pilots was based on the subjective assessment by district personnel and the SPEEDIER staff of changes that the pilots produced in the areas described by the eight pilot objectives. In addition, several more objective instruments were used to help determine the impact of both the pilot programs and the pilot procedure on student and teacher classroom performance. The use of these instruments for each pilot is described below.

Since SPEEDIER became operational during the summer of 1968 and the initial workshops were held before school started in September or at the very start of school, no pre-tests were given before the first workshops.

Student Assessment Procedures

Student assessment procedures followed a standard pre-test, post-test design. The same tests were given pre and post to the experimental group as well as to a selected control group. The changes in scores between the pre-test and post-test for the experimental students were compared with the changes in scores of the controls. The analysis followed appropriate statistical procedures using the change scores as the criteria for measurement.

Because the initial workshops for teachers in the pilots were held before or at the start of the new school year, the pre-tests were given after the workshops were held. Because the tests had to be given to students from a variety of schools, the actual date of the pre-test varied from group to group and in some cases occurred three or four weeks after the pilot program was begun in the classroom.

The actual selection of testing instruments raised two problems. Since the objectives of the experimental programs were different from more traditional social studies courses, it was difficult to select instruments that would not favor either the experimental group or the controls. Traditionally designed instruments would favor the traditional programs, and instruments designed specifically to fit the pilot programs would favor the experimentals. At the same time, the more traditional type test would be more valuable in assessing the comparison between experimentals and controls in terms of the content and skills traditionally expected of a social studies program, but it would be less valuable in assessing the degree to which each one of the pilot programs met the specific objectives stated in its rationale.

After considering the situation, the SPEEDIER staff decided to use traditional assessment instruments that purported to assess students abilities in the general areas identified in the stated objectives of the pilot programs. It was recognized that such a choice might give a slight advantage to the controls, and it would not evaluate the experimental programs in terms of their own objectives.

Teacher Assessment Procedures

The teachers involved in the pilots also were monitored. They were asked to respond to questions on three inventories at the start of the pilots (but after the first workshop) and near the end of the pilots.

1. The Survey of Interpersonal Values published by Science Research Associates. Pre- and post-test scores were compared to determine if any change occurred.

2. The Rokeach Dogmatism Scale (40-item form), which purports to measure the degree of open-mindedness of an individual's belief system. Change scores were examined.

3. The Self-perception Inventory (14-item form). This instrument is quantitative and asks the teacher to personally assess the amount of time he thinks he spends during a classroom period in the various types of interaction.

Each teacher was also asked to audio tape two hours of his lessons. The tapes were analyzed by a trained coder, who categorized the verbal interaction, using categories similar to those of the Flanders' Interaction Analysis System. The categories were the same as those the teachers were asked about on the Self-perception Inventory. Taping was done both pre and post. Changes were noted and analyzed for any significant differences between experimental and control groups. Comparisons were made between the awareness of the teachers concerning their observed verbal interaction patterns, both pre and post. The audio taping was used as a means of assessing change of teacher classroom behavior but not as a tool to facilitate the change of teacher behavior or the refinement of teaching techniques.

Assessment Procedures for the Fenton Pilot

The schools and teachers involved in the Fenton pilot were purposely selected by administrators who were interested in making modifications in social studies. Neither district participation nor teacher selection within the districts occurred randomly. When the administrators elected to participate in the pilot, they selected teachers who had previously expressed interest in trying something new or who were recognized as leaders or innovators. In most cases the participating students were those already assigned to the teachers selected. There was a conscious effort to limit participation to average and above average students, although one group of students was classified as average-to-below-average.

The control groups were obtained by matching experimental schools with schools from similar type areas. Since there was a conscious effort to expand the pilot within each pilot school, controls within those buildings had to be avoided. Some of the factors utilized for matching schools were the type of community and the size of the student population of the school. Members of the SPEEDIER staff who had extensive knowledge of the four-county area helped with the identification. When the schools were identified, classes and teachers were selected so that course content, grade level, and type of ability groupings were similar to that of the Fenton experimental group. For example, the grade ten experimental groups were matched with control groups in World Cultures courses. The students in Comparative Political

Systems were matched with students in either Problems of Democracy courses or similar courses dealing with American government. Comparative Economic Systems students were matched with those taking courses emphasizing economics. In all cases except one the control students were on the same grade level as the experimental students. The control groups are described on Table III.

Since the Fenton Program has four types of objectives -- inquiry skills, knowledge, attitudes, and values -- four tests that purport to assess or measure these areas were used in a pre-post design. The Sequential Test of Educational Progress (STEP), published by Educational Testing Service, was used to assess change in inquiry skills in the area of social studies. The Watson-Glaser Critical Thinking Appraisal, published by Harcourt, Brace and World, was used to measure change in student critical thinking ability. The Survey of Interpersonal Values, published by Science Research Associates, was used to assess change in values. All three tests were given to all of the students in both the experimental and control groups.

Tests used to assess change in knowledge for the students in specific Fenton courses and in the controls were: for Comparative Economic Systems, the Science Research Associates test entitled Test of Economic Understanding; for Comparative Political Systems, the Science Research Associates test entitled Principles of Democracy Test; for Shaping of Western Society and Tradition and Change in Four Societies, the Educational Testing Service test entitled "World History," a part of the Cooperative Social Studies Test.

Assessment Results for Fenton Pilot

Student Results

The changes in student pre-test, post-test scores are listed on Table IV. A summary of the statistically significant comparisons of changes between Fenton students and controls at each grade level shows seven instances of greater positive change for Fenton students and two instances of greater positive change for the controls. Both instances of greater change for the controls occurred in the ninth grade. On one item, the "Conformity" section of the Survey of Interpersonal Values, the Fenton students showed a greater negative change. Such a change is consistent with the stated objectives of the Fenton Program. The changes at each grade level are outlined below.

TABLE III

Fenton Controls

School	Grade	Number of Teachers	Number of Students
Controls for Ninth-Grade Fenton Students Using Economic and Political Systems Courses			
Annville-Cleona High School	9	2	39
Dallastown High School	9	1	11
Controls for Tenth-Grade Fenton Students Using Shaping of Western Society and Tradition and Change in Four Societies Courses*			
Dallastown High School	10	1	9
Manheim Central High School	10	1	21
Annville-Cleona High School	11	1	10
Manheim Central High School	11	1	18
Controls for Eleventh and Twelfth-Grade Fenton Students Using Economic and Political Systems Courses*			
Columbia High School	12	1	6
South Eastern York High School	12	1	7
Northern York High School	12	1	7
Lancaster Catholic High School	12	1	7
Cedar Crest High School	12	1	6
Conestoga Valley High School	12	1	7
Dover Area High School	12	1	7

* In some cases different grade levels had to be compared when comparable course content at grade desired was not available. Appropriate grade-level tables were used in all cases.

TABLE IV

Comparison of Change Scores on Instruments
Used to Assess Fenton Social Studies Pilot Programs

Instrument	Fenton Change	Control Change	Comparison and Level of Significance
GRADE NINE			
STEP	+	-	Fenton over Control .01
Critical Thinking	-	+	Control over Fenton .01
Economic Understanding	+	-	Fenton over Control .01
Principles of Democracy	+	+	Control over Fenton n.s.*
Survey of Interpersonal Values			
Conformity	-	-	Fenton over Control .01**
Benevolence	-	+	Control over Fenton .01
Supportive	+	+	Fenton over Control .01
Leadership	+	-	Fenton over Control n.s.
Independence	+	+	Fenton over Control n.s.
Recognition	+	-	Fenton over Control n.s.
GRADE TEN			
STEP	+	+	Fenton over Control n.s.
Critical Thinking	+	+	Fenton over Control n.s.
World History	+	+	Fenton over Control n.s.
Survey of Interpersonal Values			
Conformity	-	-	Fenton over Control n.s.
Benevolence	-	-	Control over Fenton n.s.
Supportive	+	+	Fenton over Control n.s.
Leadership	+	-	Fenton over Control n.s.
Independence	+	+	Control over Fenton n.s.
Recognition	+	+	Control over Fenton n.s.
GRADE ELEVEN			
STEP	+	+	Fenton over Control .05
Critical Thinking	+	+	Fenton over Control n.s.
Economic Understanding	+	-	Fenton over Control .01
Principles of Democracy	+	+	Control over Fenton n.s.
Survey of Interpersonal Values			
Conformity	-	-	Fenton over Control n.s.
Benevolence	-	-	Fenton over Control n.s.
Supportive	-	-	Control over Fenton n.s.
Leadership	+	+	Fenton over Control n.s.
Independence	+	+	Fenton over Control n.s.
Recognition	+	-	Fenton over Control n.s.

* n.s. = statistically not a significant difference in change score.
** On this item the Fenton students showed a greater change in the direction of valuing "conformity" less. In terms of the objectives of the Fenton Program, this should be considered a desirable change.

Instrument	Fenton Change	Control Change	Comparison and Level of Significance
GRADE TWELVE			
STEP	-	+	Control over Fenton n.s.
Critical Thinking	-	+	Control over Fenton n.s.
Economic Understanding	+	-	Fenton over Control .01
Principles of Democracy	+	+	Fenton over Control .01
Survey of Interpersonal Values			
Conformity	-	-	Fenton over Control n.s.
Benevolence	-	-	Fenton over Control n.s.
Supportive	None	-	Control over Fenton n.s.
Leadership	+	+	Control over Fenton n.s.
Independence	+	+	Fenton over Control n.s.
Recognition	-	-	Control over Fenton n.s.

The ninth-grade Fenton students had a significantly greater positive change (.01 level) in score on the STEP test, the Test of Economic Understanding, and the "Support" section of the Survey of Interpersonal Values. They showed a greater negative change (.01 level) on the "Conformity" section of the Survey of Interpersonal Values. The ninth-grade controls showed a significantly greater positive change (.01 level) on the Critical Thinking Appraisal and "Benevolence" section of the Survey of Interpersonal Values.

There were no statistically significant differences between the changes in scores for the tenth grade.

Eleventh-grade Fenton students showed a significantly greater change score on the STEP test (.05 level) and the Test of Economic Understanding (.01 level).

Fenton twelfth-grade students scored significantly greater gains on the Principles of Democracy Test (.01 level) and the Test of Economic Understanding (.01 level).

An analysis of the results of each assessment instrument showed that on the STEP test the Fenton students changed more positively than the controls in grades nine, ten, and eleven and slightly less than the controls in grade twelve. In all areas measured by the STEP instrument, the Fenton Program on the whole had a positive effect. The general results of the STEP test indicate that the Fenton students in this experiment did as well as or better than the controls.

The results of the Critical Thinking Appraisal showed no trend in the comparison of change scores for grades ten, eleven, and twelve; but the ninth-grade control group did score significantly greater positive change in mean score than the Fenton group. This difference is explained, however, by the fact that the ninth-grade Fenton students scored significantly higher (.01 level) on the pre-test than the controls. Since the Fenton students initially scored significantly higher than the controls, they had less room in which to increase.

It should also be noted that this difference in pre-test scores might be attributed to the fact that the pre-tests were given up to several weeks after the start of the pilot. The results on the whole do not show that the program had any significant effect, as compared to the controls, in changing the ability of students to think critically.

On the Test of Economic Understanding the Fenton students showed statistically significant (beyond the .01 level) positive change scores over the controls at all levels (grades 9, 11, and 12). This result shows that the Fenton students' proficiency on this instrument increased more than the controls' at all levels.

The Principles of Democracy Test showed the twelfth-grade Fenton students in the Comparative Political Systems course made more positive change (.01 level) on their mean scores than the controls. This result shows that the pilot students learned more of the information that this test included.

On the Survey of Interpersonal Values significant differences in mean change scores between Fenton students and controls were recorded only at the ninth-grade level. At this grade level the Fenton students changed to value "conformity" and "benevolence" less and to value "support" more. All three changes were at the .01 level of significance. Across grade levels, non-significant trends also appeared within some of the traits. The pilot group tended to decrease their value on "conformity" and to increase their value on "support," "leadership," and "recognition." No across-grade-level trend was evident for "benevolence" and "independence." There is no assurance from the evidence that any of the changes are permanent.

Teacher Results

The Fenton teachers showed significant differences from the controls on only two measures, and even these results cancel out each other to some extent and are clouded by the fact that the in-service training that emphasized teacher-pupil classroom interaction occurred before the first classroom taping. A comparison of the pre-test of the Self-perception Inventory and the pre-tape showed that the Fenton teachers were significantly more aware of their classroom behavior than the

controls (.05 level). When the changes between pre-test and post-test for the Fenton teachers were matched with the same changes in the controls, only one area showed a statistically significant difference in change scores. The Fenton teachers' discrepancy score concerning teacher lecture changed significantly less than the controls. This means that the control teachers changed more than the Fenton teachers to become more aware of how much they lectured. Since the Fenton teachers were originally more aware of their total classroom behavior, this result was not unexpected. The comparison of the pre-post changes between Fenton teachers and controls on the Self-perception Inventory and on the analysis of classroom tapes showed no significant difference.

Based on an analysis of pre-test and post-test, the Fenton teachers tended to change to become non-lecture oriented in their teaching. (Remember, the pre-test was administered after the initial workshop.) The initial data showed that they were more non-directive, lectured less, and encouraged more student talk than the controls. Then during the year they changed to approach the interaction patterns of the control group. Since the first series of workshops stressed the technique of teacher-directed discussion rather than lecture and the remainder emphasized content, this result seems logical. If permanent changes in teacher behavior and awareness are desired, it seems advisable to continue to re-enforce desired classroom techniques in workshops held during the year while the pilot teachers are working in the classroom.

On all other measures of change in perception, observed behavior, and discrepancy scores, no significant differences or trends appeared. For the Test of Interpersonal Values and the Rokeach Dogmatism Scale, an analysis of change scores showed no statistically significant differences between the Fenton and the control group.

Summary

The Fenton Program prepared the students for the STEP test as well as or better than the traditional programs. It did not produce a significant difference on critical thinking. It may have produced minor changes in student values as tested on the Survey of

Interpersonal Values. An obvious strength in the Fenton curriculum appears in the area of economics since the experimental groups scored a greater change on the Test of Economic Understanding at all grade levels. At the twelfth grade, Fenton students showed a greater change on the Principles of Democracy Test. The tenth-grade materials did not produce a significant difference from the controls on the "World History" instrument.

The Fenton teachers were more aware of their teaching behavior and were less lecture oriented than the controls at the end of their initial workshop, but during the year they regressed on both points. At the time of the post-test, they were still more aware of their behavior and less lecture oriented than the controls, but the distance between them and the controls might have been maintained if teaching techniques would have been more of a concern of the workshops during the year. On other measures of change the Fenton teachers did not change significantly from pre- to post-test, and the changes that did occur were not significantly different from those of the controls.

Assessment Procedures for Elementary Pilots

The selection of pilot districts, teachers, and classes for the elementary pilots were based on a variety of priorities set by the districts of the area. The selection was not random. When the chief school administrators received information on the four elementary social studies programs, they informed SPEEDIER concerning their willingness to establish pilots. In the districts that indicated a willingness to participate, the administrator decided which programs would be piloted, determined the number of teachers and classes that would be involved, and selected the teachers. SPEEDIER recommended that at least two classes at each grade level be selected, but beyond that the individual districts made their own selection. The teachers and classes selected constituted the experimental groups.

For the elementary control groups, it was determined that two classes at each grade level would be a sufficient sample. It was also decided that all control groups must come from school districts that were not already participating in the elementary social studies experimental groups. School districts not involved were then randomly sampled. After the selection of school districts was made, two grade levels were randomly assigned to each of the eight districts sampled. This assured two classes each at grades one through eight. Then, teachers were randomly sampled at the particular grade level by using directories available for each of the four counties. Each directory listed the names of all the teachers within that county. The control groups are described on Table V.

For the students of both the experimental and the control groups, two grade-level divisions were made because the testing materials available for primary and intermediate grades were different. Grades 1-3 were placed in one group and grades 4-8 in another.

The pupils in grades 1-3 were given the Primary Social Studies Test, published by Houghton Mifflin Company. It is a non-verbal test where the teacher reads the questions and the students put marks on pictures. The second test given to the students at this level is an adaptation of the Five Faces Attitude Inventory developed by Scott and Jeffress and the Pittsburgh Public Schools Office of Education, Pittsburgh, Pennsylvania. It is described as a non-verbal attitude scale. Another modification of it was used as a post-test to determine attitude scores by Research for Better Schools in their I.P.I. program.

All of the students in the grade 4-8 group, both control and experimental, were given the Sequential Test of Educational Progress (STEP) at the appropriate grade level. Norms are available for grades 4-8 with the appropriate testing form.

Teacher inventories and procedures were the same for experimental and control groups as they were for the Fenton pilot.

TABLE V

Elementary Controls

Schools	Grade	Number of Teachers	Number of Students
Cornwall-Lebanon School District			
Ebenezer Elementary	3	1	28
South Lebanon Middle School	8	1	32
Cornwall Middle School	8	1	30
Eastern Lancaster School District			
Brecknock Elementary	1	1	25
Brecknock Elementary	6	1	21
Manheim Central School District			
H. C. Burgard Elementary	1	1	28
H. C. Burgard Elementary	2	1	30
Middletown Area School District			
L. J. Fink Elementary	5	1	23
Middletown Junior High School	7	1	26
Northern Lebanon School District			
Jonestown Elementary	6	1	21
Northern York School District			
Northern York Elementary	3	1	25
Northern York Elementary	4	1	37
Penn Manor School District			
Conestoga Elementary	2	1	21
Penn Manor Junior High School	7	1	15
Southeastern York School District			
Southeastern Elementary	4	1	22
Southeastern Elementary	5	1	26

Assessment Results for Elementary Pilots

Student Results

The comparisons of experimental group and control group change scores from pre-test to post-test are listed on Tables VI, VII, and VIII. A summary of the statistically significant results follows.

> On the Primary Social Studies Test all experimental groups showed a positive change over the pre-test, but the change was significantly greater than the controls only at grade one and this was true for only three of the four programs. At grade three, the amount of increase for the Taba students was significantly less than that of the controls.
>
> On the STEP test all experimental groups showed a positive change over the pre-test, but none of the changes were significant when compared to the controls.
>
> On the Five Faces Attitude Inventory experimental change scores were not significantly different from those of the controls.

A comparison of the change scores for each of the four pilot programs shows no significant difference between the pilot programs at any grade level on any test instrument. When each pilot group is compared with the controls, the differences that are significant are the exception rather than the rule. The only significant difference between the Taba students and the controls was on the Primary Social Studies Test at grade three where the positive change for the Taba group was significantly less than that of the controls at the .01 level. The only significant differences for Minnesota, Greater Cleveland, and Senesh students occurred at grade one. The Minnesota and Senesh level of significance was at the .05 level, and the Greater Cleveland level was .01.

TABLE VI

Comparison of Elementary Student Change Scores with Controls
on the Primary Social Studies Test

Grade	Taba	Minnesota	Cleveland	Senesh
1	Greater	Greater*	Greater*	Greater*
2	Less	Greater	Greater	Less
3	Less**	Less	Less	Less

Notes:
All change scores were +. Listing is made with reference to elementary controls at that grade. Unless marked with an asterisk (*), the change comparisons were not statistically significant.

* Minnesota over Control .05 level
Cleveland over Control .01 level
Senesh over Control .05 level

** Taba less than Control .01 level

TABLE VII

Comparison of Elementary Student Change Scores with Controls on the STEP Social Studies Test

Grade	Taba	Minnesota	Cleveland
4		Greater	Greater
5	Greater	Less	Greater
6	Same		Greater
7			Greater
8			Same

Notes:
All change scores were +. Listing is made with reference to elementary controls at that level.

None of the change comparisons were statistically significant.

TABLE VIII

Comparison of Change Scores with Controls
on the Five Faces Attitude Inventory

Grade	Control	Taba	Minnesota	Cleveland	Senesh
1	+	+ greater	+ greater	+ greater	+ greater
2	+	+ less	-	+ less	+ less
3	-	- less	+	+	+

Notes:

+ or - refers to change score, post-test to pre-test

Greater or less compares amount of change with control

None of the change comparisons were statistically significant.

In the first grade the elementary control groups showed the lowest mean change score on the Primary Social Studies Test. Even though the Taba first grade showed a greater mean change score, it was not enough to be statistically significant. The other three pilot groups were significantly higher than the controls. Based on this result, it appears that the Minnesota, Greater Cleveland, and Senesh students increased their level of performance because they received more content measured by this particular instrument.

The second grade results revealed no significant difference in mean change score on the Primary Social Studies Test and no apparent trend appeared in a comparison of the mean scores.

In the third grade the only statistically significant difference in mean change score on the Primary Social Studies Test appeared between the Taba group and the controls. The Taba group scored a smaller mean change at the .01 level. The other three programs were all lower than the controls but the difference was not statistically significant. This result might mean, that since the Taba Program is technique oriented, the students did not receive as much content as is usually included in the third grade. Also the teachers might have been concerned more with method than content.

The Five Faces Attitude Inventory showed no significant difference in mean change scores in the first, second, or third grades. However, a non-statistical trend appeared when the mean change scores on each grade level were calculated. The change in positive attitude toward school for both experimental and controls decreased with increasing grade level.

On the STEP Social Studies Test, Form B, there were no statistically significant differences in mean change scores between any pilot group and the controls for any grade, four through eight. However, a trend was evident. At each grade the mean change scores of the pilot groups were either the same as or slightly greater than the controls. This indicates that the pilot students' change in achievement on the skills and content tested by this instrument compared favorably with the controls.

Teacher Results

Because there were too few seventh and eighth grade teachers to provide accurate results, only teachers of grades one through six were given the teacher assessment instruments. All four pilot programs were represented.

In essence, the results showed no significant changes, pre- to post-test, and no significant change score comparisons with the controls. There was no significant pre-test difference from the controls on the Rokeach Dogmatism Scale, the Survey of Interpersonal Values, and in observed verbal classroom behavior. There was no significant difference in change scores on the Rokeach Dogmatism Scale and the Survey of Interpersonal Values. Also there were no significant changes, pre- to post-test, in self-perception of classroom behavior and discrepancy between the perception and observed behavior. This tends to show that the study had similar effects on the teachers of all four pilot programs and that there was no significant effect of the programs or the in-service workshops on the teachers in the areas assessed. It is possible that any changes that might have occurred were not measured by the instruments used.

Summary

In general, the elementary pilot programs prepared the students for the Primary Social Studies Test and the STEP test as well as or better than the traditional programs. On the Five Faces Attitude Inventory no significant differences from the controls were noted. Neither the programs nor the in-service workshops changed the teachers significantly nor produced any significant differences from the controls in the areas measured.

CONCLUSIONS

Conclusions in Terms of Purposes of the Pilots

Purpose One

Nearly all of the participating teachers, the district administrators, and the SPEEDIER staff felt the pilots led to definite improvement in social studies instruction in the participating districts. The teachers were most positive of the three groups. The elementary teachers in particular felt the pilot programs they were using were much better than their traditional social studies. A large majority of all the teachers recommended continued use of the new programs and recommended that their districts expand the pilots. However, the SPEEDIER staff feels that the "Hawthorne Effect" was a factor in teacher reaction to all five pilots. It is looking toward a more valid reaction after the teachers use the programs for a second year.

Outside social studies experts who worked with the teachers also felt that the pilots were valuable in improving social studies instruction. Their limited knowledge of the instruction traditionally pursued in the area, however, limits the value of their assessment.

Purpose Two

The teachers, administrators, SPEEDIER staff, and outside social studies experts who have worked with the pilots all felt that teacher classroom behavior was modified positively by the pilot experience. The assessment procedures used also reinforced this conclusion. It must be pointed out, however, that the most significant change in teacher classroom behavior occurred after the initial workshop. In most cases, when the performance of teachers was matched with their perception of their classroom behavior and with the type of classroom behavior expected of the new programs they were using, the teachers regressed during the year.

It seems clear that if teacher classroom behavior is to be modified permanently, in-service workshops must continue to reinforce the expected change in behavior during the school year and specific training should be devoted to mastering new teaching strategies and techniques. The use of new social studies programs alone without emphasis on changed teaching strategies and techniques will not assure a permanent change in teacher behavior.

Purpose Three

All of the teachers and administrators who worked directly with the new pilots came in contact with new social studies content, ideas, and teaching approaches. Only a few of the participating districts and teachers had known anything about the five social studies pilot programs before they were approached by SPEEDIER. Other educators in the area who visited the pilot teachers, who participated in shorter-term in-service workshops and information sessions conducted by SPEEDIER, and who received printed information about the pilots also gained in their understanding of the new social studies. A multiplier effect is expected in this dissemination of new social studies information each year.

Purpose Four

The participating teachers did develop new teaching skills. As was pointed out earlier, however, evidence that they mastered these new skills to a degree that would assure their permanent use was not demonstrated. As a result, modifications in the pilot model, which include heavier emphasis and practice in the use of new teaching strategies, have been added for 1969-1970.

Purpose Five

At the beginning of the five social studies pilots the common procedure for changing the social studies curriculum in the districts served by SPEEDIER was the selection of a new social studies textbook series. In most cases all of the available materials were not analyzed by the committees appointed to make the selections, and there were usually no recognized criteria used in the selection process. Curriculum change was generally viewed as a single step adoption because old books had worn out. Although lip service was paid to the idea that curriculum change should be a continuous and evolving process, it was not carried out in practice. Teacher in-service workshops were not seen as part of the change process.

The use of the pilot model seems to have changed the perceptions of many educators on all of these points. There is considerable evidence that actual practice in curriculum revision is being modified. The extent of the impact and the permanency of its effect can only be determined after a longer period of time.

Purpose Six

A positive attitude toward curriculum experimentation and change on the part of participating teachers and administrators seems apparent. During the course of the pilots, nearly all teachers indicated that the amount of work involved was more than they had expected and nearly all administrators expressed apprehension about the cost, particularly that spent for in-service training of teachers. By the end of the school year, nearly all members of both groups felt the pilot efforts were worthwhile, and they indicated an intention to continue the experimentation.

Purpose Seven

All of the educators of the area who participated with the pilots received new insights concerning social studies and curriculum change. This is particularly true of the teachers who were involved directly, since many of them traditionally had played little or no role in the process of curriculum change. At this point, it seems that these people are better prepared to improve the curriculum of their own school systems, but consultant aid from SPEEDIER and other outside experts seems to be necessary for the near future.

Purpose Eight

Many of the districts that participated in the pilot have modified procedures and policies for handling and promoting curriculum change. The inclusion of significant in-service training of teachers as part of curriculum revision and the view that curriculum revision is a continuous process are probably the two most significant changes. In addition, many districts began for the first time to make budgetary provisions for the payment of teachers to work in curriculum revision or for the provision of substitute teachers to free them to participate.

Conclusions about the General Assumptions of the Pilots

None of the thirteen assumptions upon which the pilots were based were refuted by the experiences of 1968-1969. However, four of the assumptions should be restated in light of the year's experiences and one additional assumption should be added to the list. The changes should be as follows:

Assumption five, which originally read:

> One or two-day in-service programs would be similarly ineffective.

should be restated to read:

> Short term in-service programs that do not tie directly into classroom activities of the teachers involved would be similarly ineffective.

Assumption seven, which originally read:

> These materials can be used as vehicles for updating social studies curriculum contents, teaching strategies, and administrative procedures.

should be restated to read:

> These materials can be used as vehicles for updating social studies curriculum contents, teaching strategies, and administrative procedures as long as the types of changes are identified and in-service programs are directed toward the producing of these changes. The materials alone will not produce the most effective change.

Assumption ten, which originally read:

> By piloting the programs in their own schools, local teachers and administrators will be able to make a valid assessment of the programs in terms of their own priorities.

should be restated to read:

> By piloting the programs in their own schools, local teachers and administrators will be able to make a valid assessment of the programs in terms of their own prior experience. If the districts do not have clearly established priorities, the pilot will provide information that can be used to set the priorities. However, if the assessment is to be valid, the possibility of a strong "Hawthorne Effect" concerning the new program should be taken into consideration.

A Fourteenth Assumption that should be added should be:

14. New social studies programs do not serve as efficient vehicles for changing teacher behavior unless the specific desired behavior changes are determined and workshop sessions are provided to instruct the pilot teachers in the desired teaching strategies.

Conclusions Concerning the Pilot Model

On the basis of one year's experience the model seems to be effective. The five phases seem to represent five different steps in the process of producing effective curriculum change in social studies in the four counties served by SPEEDIER. It should be noted, however, that the amount of time and effort placed on each one of the five phases often varies according to the district and the people involved. For instance, some situations require a rather extensive "Climatizing" stage while others permit initiating a pilot rather quickly.

Determining factors that affect the amount of time and effort necessary for climatizing are the perceptions of the educators concerning curriculum revision and the degree to which they are satisified with their current program. It appears that one "innovator" within a district can produce a significant change if the people with whom he works are not negative toward change. If, however, one strategically placed person is committed to the status quo, the possibility of producing significant change within one year's time is severely limited.

The selection of programs for piloting in Phase II of the pilot requires a caution that SPEEDIER had not expected. Under the original conception of Phase II, SPEEDIER would present to districts information about a variety of programs that the staff felt would be possible improvements for the districts. These were presented as alternatives from which the district would select the particular program or programs that seemed to be most valuable and appropriate for it. However, many of the district administrators and teachers did not feel confident to make a selection and often indicated that they were willing to work with any program that SPEEDIER would suggest. This reaction indicated

to the SPEEDIER staff that the recommendations to the district should be more thoroughly studied than had been anticipated and should be more specific. It also pointed out that the pilot should incorporate instruction in a process of program selection for teachers and administr tors.

Within Phase III, the Pilot Implementation Stage, where the pilot is used in the classroom under the observation and with the consultation of SPEEDIER staff members, is the most critical part of the entire pilot. The implementation staff member assigned to each pilot must be able: (1) to see that the teacher is implementing the program effectively, (2) to provide support for the teacher, (3) to provide direction so that the implementation process and the use of the program are not distorted, (4) to determine the type of advice and assistance that is needed, and (5) to secure that assistance in a very short period of time. At the same time, he must be able to use his contact with the teacher and observation in the classroom to determine the direction and pace of the entire pilot.

Within the Pilot Implementation Stage, the segment that emphasizes refinement of teaching techniques is most difficult. It is here that all of the skills of the Implementation Director are called upon. He must be able to provide support, direction, instruction in new techniques, and constructive criticism.

The Critical Evaluation part of Phase III was not pursued in as much depth as was originally expected. The SPEEDIER staff decided near the end of the school year that the degree of sophistication of the participants and the amount of work that had already been put into the pilots by many of the teachers made the postponement of a rather thorough critical evaluation advisable.

None of the districts working with SPEEDIER functioned in Phase IV during 1968-1969. It does appear, however, that much work in Phase IV must be devoted to the development of instructional leadership skills in the administrators in each district if the transfer of responsibility for curriculum experimentation and change is to be shifted from SPEEDIER to people within the districts.

Unexpected by SPEEDIER, several districts moved into Phase V at the end of 1968-1969 by informing SPEEDIER that they were adopting the pilot program they used during the year. SPEEDIER feels that to some extent this rather quick step resulted from dissatisfaction with the traditional social studies program that the districts had used, but it also believes that it might be part of the older perception of curriculum revision under which the entire process is viewed as a one-step change from something old to something new. Because of these factors and because the "Hawthorne Effect" appeared to be present, SPEEDIER found it necessary to caution districts that the programs they had been piloting are only a few (in many cases only one) of many new social studies programs and that other programs not used during the first year of the pilot might prove even more satisfactory to the district.

With the changes in emphasis described above, the pilot model is now being used for a second year. Reports of the effectiveness of the model as revised will be reported during the year. A preliminary report for 1969-1970 will be available in February or early March, and a second-year report on pilot operations will be available after the conclusion of the 1969-1970 operational year in July.

Conclusions Concerning the Five Pilot Programs

Fenton Program

The Fenton Program served as an effective vehicle for change in terms of the purposes established for the social studies pilots. In general, the participating teachers and administrators of the districts in which it was used felt it was a significant improvement over their traditional social studies programs. The use of the program did require adjustments in teacher strategies, district policies, and student performance. The teachers felt that the program as a whole was teaching more significant information and skills then their traditional program; but they said the lessons had to be revised and used flexibly or it, like all programs, could become boring. Students who were highly conscious of grades often commented that they felt more secure with more factual learning. Thirteen of the fifteen pilot teachers are continuing with the program for 1969-1970. In one

district where the Fenton students moved into an eleventh-grade research-oriented American history course in the 1969-1970 school year, the teacher noticed a significant improvement over passed years in the ability of the students to analyze historical information.

The research studies conducted during the pilot show that the program was as effective in teaching social studies information as the traditional social studies. The students who participated in Comparative Economic Systems did significantly better than the controls. There was no significant difference in critical thinking or in over-all changes of values between the Fenton students and the controls.

Taba Program

The Taba Program was effective in producing change in terms of the pilot purposes. All the participating teachers and administrators felt it was a significant improvement over their traditional social studies. The use of the program did require changes in teaching strategies, district policies, and student performance. It was probably the most effective of all the programs in producing change in the teacher behavior, which has been attributed to its complete and specific in-service training component.

Participating teachers and administrators of the districts in which it was used were unanimous in their support of the program. Every teacher is continuing with the program and it has the largest increase in participants for 1969-1970 of all the pilots. Two schools within the area and two other districts outside the four counties served by SPEEDIER are presently engaged in using the program with all teachers in a single school. There are indications that several districts are moving toward district-wide adoption. Generally, the test instruments do not show significant differences between the Taba students and the controls.

Minnesota Program

The Minnesota Program seems to be an effective vehicle for producing the changes outlined in the pilot purposes. Most of the participating teachers and their administrators felt it was an improvement over their traditional social studies. The use of the program

has enabled teachers to expand the content they taught and become much more flexible in their teaching, but change in teacher behavior was only slightly evident. SPEEDIER attributes this small degree of change to the way in which the Minnesota Program was implemented under the pilot rather than in the program itself. It believes that if the specific teaching strategies to be used with the program are identified as part of the pilot and if in-service training of teachers is directed toward producing these changes, the program will be a very efficient vehicle for changing teacher behavior.

A majority of the teachers and districts that used the Minnesota Program recommended that it be continued in their district. Two districts chose to expand the pilot, one of which is now using it district-wide in grades K-3 and will expand it to include all elementary grades in 1970-1971. On the testing instruments, there was no significant difference between the performance of the students as compared to the controls.

Greater Cleveland Program

The Greater Cleveland Program served effectively as a vehicle for change in terms of the pilot purposes. All participating teachers and their administrators felt it was an improvement over their traditional social studies. It enabled the teachers to expand the content they covered but it did not produce a significantly greater degree of flexible teaching; and, like the Minnesota Program, it did not produce significant changes in teacher behavior. Here, also, it appears the changes in teacher behavior require additions to the pilot training sessions.

All of the participating teachers and districts recommended continuation of the program and several expanded its use for 1969-1970. One district included it in all its primary grades and will expand it to other elementary grade levels in 1970-1971. Results of the assessment instruments of the program show no significant difference between the performance of the students in the program and the controls.

Senesh Program

Because of a series of administrative problems within some of the pilot districts and the unwillingness of some teachers to have their classroom performance observed by an outside consultant, the Senesh Program was not given as thorough a trial as had been hoped. It does appear, however, that the Senesh Program is an efficient vehicle for change in terms of the pilot purposes. As in the case of the Minnesota and Greater Cleveland Programs, the program without specifically determined instruction in particular teaching strategies does not produce significant changes in teaching behavior. Where the program was given a valid trial, the teachers and district administrators recommended its continuation and expansion. Most of the expansion, however, was done on a district basis because the people involved felt that it could be accomplished without the consultation assistance of SPEEDIER. Results of the assessment on student performance indicate no significant difference between the Senesh students and the controls.

SOCIAL STUDIES PILOTS -- 1969-1970
PRELIMINARY REPORT
July-December, 1969

Introduction

The social studies pilots for 1969-1970 are a continuation of the first-year pilots listed in the preceding report. SPEEDIER staff members serving the pilots are the same as in 1968-1969 except for the Group Dynamics Specialist who is no longer employed by the Project

Purposes of the Pilots

The purposes of the social studies pilots for 1969-1970 are the same as the eight purposes established for the first year. The thirteen underlying assumptions on which the pilots are based are also being maintained into the second year, but a fourteenth assumption has been added:

14. New social studies curriculum projects do not serve as efficient vehicles for changing teacher behavior unless specific desired behavior changes are determined and workshop sessions are provided to instruct the pilot teachers in the desired teaching strategies.

Pilot Programs

The five social studies pilot programs used in the first year are being continued into 1969-1970. The programs and grade levels in which they are being piloted are listed below. A few of the pilot teachers from last year are working directly with these pilots, but many of last year's participating teachers are continuing their work with the programs with only periodic consultation from the SPEEDIER staff. Only the teachers involved directly are included below.

Program	Grade level for which materials were designed	Grade levels in pilots
Fenton Social Science Program (Holt, Rinehart and Winston)	9,10,11	9,10,11
Greater Cleveland Social Science Program	1-8	1-8
University of Minnesota Project Social Studies Program	K-12	K-5
Taba Social Studies Curriculum	1-8	1-7
Senesh Social Science Program (Science Research Associates--"Our Working World")	1-3	2

Originally, plans for the second year social studies pilots included expansion in two directions. More schools, teachers, students, and grade levels were to be added to the five pilots already begun, and additional pilot programs were to be added. The programs to be added were mainly new social studies programs that involved teaching time of one year or less. Many of those tentatively selected were unit-length programs or programs for which single unit pilots could have been conducted. Programs tentatively selected for use were:

Programs	Grade levels to be in pilot
SECONDARY	
Harvard Project--Public Issues Series	9-12
High School Geography Project	10-12
American Political Behavior Course (High School Curriculum Center in Government, Indiana University)	9
Simulations	7-12

Programs	Grade levels to be in pilot
ELEMENTARY	
Man: A Course of Study (Educational Development Center)	5
Social Science Laboratory Units (Science Research Associates)	4-6
Intergroup Relations Curriculum (Lincoln-Filene Center for Citizenship and Public Affairs)	3-6
Man in Action Series (Prentice-Hall)	1-3
Why United States Space Exploration (Revell Educational Systems)	5

Pilots of these programs were not begun at the start of the school year because of the forty percent reduction in Title III funds. Because of the cutback, the SPEEDIER staff decided to proceed with the expansion of the present pilots but not to begin working with new programs in September. The decision was based on the fact that SPEEDIER had assured districts who had begun using the original five programs in 1968 that it would continue these pilots and train additional teachers where requested.

SPEEDIER is now planning to pilot on a very small scale three social studies curriculum programs during the spring of the 1969-1970 school year. These are:

Three units of the course entitled American Political Behavior developed for ninth grade by the High School Curriculum Center in Government, Indiana University.

Two or three units of the High School Geography Project developed for secondary grades by the High School Geography Project, Boulder, Colorado, published by Macmillan Company.

The simulation game "Crisis in the Balkans" developed by the Foreign Policy Association for secondary school use.

Each of the three programs will be used by four to six teachers who will work directly with a SPEEDIER staff member assigned to work with that particular program. It is anticipated that the in-service workshop time would involve only one full day plus short-term consultation sessions.

The Pilot Model

The pilot model is the same as used in 1968-1969. For some districts Phase IV -- Pilot Operation - Second Year has begun. Other districts are using a pilot for the first year in Phase III -- Pilot Operation - First Year.

Although the model itself has not been changed, considerably more emphasis will be placed upon the refinement of teaching techniques in both Phases III and IV. The results of the pilots for 1968-1969 indicate clearly that change in teacher classroom behavior toward the use of newer social studies teaching strategies was not successful when the new programs were expected to serve as vehicles for change without heavy in-service instruction and consultation on the new strategies. This emphasis will receive most of the attention of the pilot implementation directors during January, February, and March. Demonstrations of particular new social studies strategies, instruction in those strategies, and teacher practice with them will be part of the effort. Audio and video tapes used in the classroom as well as in micro-teaching situations will be used to provide feedback to teachers in an effort to have them develop new strategies and refine their use of them.

Pilot Preparation

Pilot preparation for all social studies pilots for 1969-1970 actually began with the dissemination phase of the pilots for 1968-1969. In February and March, 1969, all educators in the four counties were invited to visit the classrooms of the current pilot teachers. In addition, Pilot Information Sessions were scheduled weekly during the visitation period in order to explain the five programs being piloted and the nature of the pilot procedure.

Original plans called for a series of information sessions to be held in April during which the pilot programs that would be begun for the first time in 1969-1970 would be presented so interested educators could make thoroughly-studied decisions concerning expanded pilot participation. As was explained earlier, these sessions were not held because SPEEDIER was informed that the Federal appropriations for ESEA Title III would be forty percent less than that expected. It was the understanding of SPEEDIER staff at that time that according to Department of Public Instruction policy this cutback in federal funding would be applied in Pennsylvania to all Title III centers equally. Because of the cutback, SPEEDIER felt that it would not be able to expand pilots to include new programs. Instead it concentrated only on the expansion of its present pilot programs.

In May all chief school administrators in the four counties received an invitation to add teachers to the five social studies pilots. The invitation included a response card on which the administrators could indicate their interest in any one or more of the pilot programs. Upon receiving the return cards, SPEEDIER staff members visited the administrators individually and developed agreements that would guide the participation of their teachers during the following school year.

The only significant difference in the agreement from the previous year was that each district was to be charged $50 per participating teacher. The cost was intended to cover approximately one-fourth of the cost to SPEEDIER for the in-service training and was necessary because of the reduction in Title III funds. As a result of this change, some of the districts that originally indicated interest chose not to participate.

All administrators in the four counties who did not respond favorably to the invitation to add pilot teachers were visited by a representative of the SPEEDIER staff. Originally the purpose of these visits fit under the Climatizing Phase of the pilot model. The intention of the visit was to "sell" the idea of curriculum change through pilot participation to the administrator. By the time the visits were scheduled in May and June, however, the purposes were modified because SPEEDIER realized that with a reduced

budget it would not be able to handle a large increase in pilot participants. In view of this change, the administrators were simply asked if they had any questions concerning the pilots and if they wanted to have people within their districts participate. If their response was "no," the matter was not pursued by the SPEEDIER representative.

During April and May, SPEEDIER was contacted by several school districts outside the four-county area concerning possible in-service training of their teachers in some of the programs that SPEEDIER was already piloting. SPEEDIER developed general guidelines under which this kind of activity could be pursued as long as the districts were willing to absorb the entire costs since SPEEDIER's federal funding could not be applied outside the four counties. Eventually Wilkes-Barre City Schools and the Public Schools of the Tarrytowns, New York signed agreements to work with SPEEDIER for the training of teachers in the Taba Program.

SECONDARY PILOT ACTIVITIES

Fenton Program

For the second year the Fenton Program is the only program piloted at the secondary level. The districts that have teachers working in the pilot for the first time, plus a breakdown by grade level, number of teachers, and number of students are listed on Table I. In addition to these teachers, ten Fenton teachers who began working with the program in 1968-1969 continued with the program. SPEEDIER is providing these teachers with consultant services when asked, but the teachers are not involved directly in workshops.

Pilot Preparation for Fenton Program

Several districts indicated interest in adding teachers to the Fenton Program on their response card to the letter of inquiry. The school administrators of each of these districts were visited by SPEEDIER staff members and the details of a tentative agreement were discussed. Of the districts that expressed interest, two changed their minds before agreements were

Districts Involved in Fenton Pilot with First-Year Teachers

Districts	Grade Level	Courses Taught*	Number of Sections	Number of Teachers	Number of Pupils
Central Dauphin**	9	Eco./Pol. Systems	1	1	28
Central York***	10	Western Soc./Four Soc.	3	1	80
Lampeter-Strasburg	10	Western Soc./Four Soc.	2	1	56
Spring Grove Area	9	Eco./Pol. Systems	2	1	54
	10	Western Soc./Four Soc.	2	1	57
	11	U. S. History	2	1	53

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* "Eco. Systems" represents Comparative Economic Systems

"Pol. Systems" represents Comparative Political Systems

"Western Soc./Four Soc." represents Shaping of Western Society and Tradition and Change in Four Societies

** Teacher joined pilot in December

*** Teacher joined pilot in November

signed because the teachers within their system who had worked with the first-year pilot had informed them that they had accepted new teaching positions in other districts. The administrators had planned to rely heavily on these second-year teachers in working with the new teachers. Two other districts that planned to add teachers reported later that they were unable to find teachers within their system who wanted to participate. As a result only four new teachers began the Fenton pilot in August. However, two others were added after the start of the year.

The addition of the two teachers came about when SPEEDIER learned that three teachers in the area who were using the Fenton materials in districts that chose not to work directly with SPEEDIER were having difficulty and wished to work within the SPEEDIER pilot. Dr. Hamill sent letters to their administrators, indicating that this information had come to SPEEDIER's attention and asking if they would like SPEEDIER to be of assistance. Two of the districts indicated that they would like their new teacher to work within the pilot. Those teachers were contacted by Mr. Baer and were added as regular pilot teachers for the remainder of the year. In the other district, although the district administrator has not responded to date, the teacher has received some assistance upon visiting the SPEEDIER office.

Introductory Workshop

On August 25-26 the Fenton teachers attended a four-day workshop. The first two days dealt with the Fenton idea of inquiry teaching, the overall rationale for the Fenton Program, the use of a modified form of the Flanders' Interaction Analysis System, the use of the Self-perception Inventory, the use of video-tape recordings of lessons for feedback information to the teacher, and the analyzing of teacher classroom behavior. The second two days were devoted to instruction on behavioral objectives and to modifying of the objectives stated in the Fenton teaching guides to make them more behavioral in nature.

Pilot Implementation -- George M. Baer, Implementation Director

Introduction of Materials

Although delivery from the publisher of the Fenton materials for grade eleven was slightly delayed, the pilots were able to begin within a few days of the start of school. The teachers expressed little difficulty in becoming familiar with the new materials. When difficulties did arise they had an opportunity to talk with other teachers in their building who had participated in the pilot the year before. This communication apparently enabled the teachers to become familiar with the materials and the nature of the program rather quickly and to move into the refinement of their newly-tried teaching techniques. Mr. Baer visited each teacher within the first month of the pilot.

Refinement of Teaching Techniques -- First-Year Teachers

Immediately after Mr. Baer's first visit to the teachers he began to emphasize the refinement of the teaching techniques used in the program. Video taping of regular classroom sessions was begun in October. The teachers were then given the opportunity to view the taping of their class and to comment upon their own performance. In the first school-year workshop, held on November 24, Dr. Kendrick McCall explained to the teachers the use of micro-teaching as a device for refining their teaching techniques, and he showed how the modified Flanders' Interaction Analysis System and the Self-perception Inventory could be used with micro-teaching. The afternoon session of the meeting was devoted to further analysis of the classroom video tapes that were made of each teacher's class.

In January each first-year Fenton teacher will participate in micro-teaching conducted by Dr. McCall. The teachers will be asked to prepare a five to ten minute lesson on a specific objective that can be taught to approximately six students. They will teach the lesson before a video-taping camera without any other adults in the room. Following the teaching of the lesson they will view the tapes, make suggestions for change, and, if they wish, ask the SPEEDIER consultant for his comments. Following the viewing of this first tape, the teacher will decide which items in his presentation he wishes to modify and will re-teach the lesson to a second group of students. Then the teacher will view the playback of his second micro-teaching session. Tentative plans call for other micro-teaching sessions in succeeding months.

Refinement of Teaching Techniques -- Second-Year Teachers

The refinement of teaching techniques for the second-year teachers does not follow a specific plan. Early in the school year all second-year Fenton teachers were asked to respond to a questionnaire concerning the type of assistance they would like to have from SPEEDIER this year. Most of the teachers indicated that they felt confident to function with the Fenton Program on their own but wished to have consultant assistance available from SPEEDIER when needed. Several teachers also specifically mentioned help in securing supplementary material. When these teachers contact SPEEDIER, consultant assistance is provided. In addition, plans for January and February include a visit by Mr. Baer to all of them.

Dissemination

The dissemination stage of the pilot for first-year teachers will be conducted during the second half of the year. The procedure used will be similar to that used in 1968-1969. For the second-year Fenton teachers dissemination will be less formal. In general, the visiting of second-year teachers will be left to the districts involved; but, when SPEEDIER is contacted by potential visitors, it will work with the districts to arrange visits.

Critical Evaluation

At the present time there are tentative plans to work with both first and second-year Fenton teachers near the end of the year in the use of the Curriculum Analysis System developed by the Social Science Education Consortium. The desire of Fenton teachers to participate and the availability of funds will determine if this is carried out. In any event, evaluation sessions will be held at which the value of the Fenton Program will be discussed by the Fenton teachers in terms of the objectives of the participating districts for the coming year.

ELEMENTARY PILOT ACTIVITIES

During 1969-1970 the four elementary social studies pilot programs are being used in thirteen school districts by 174 participating teachers. Grades one through eight are included. A breakdown by district, grade level, number of teachers, and number of students is reported on Table II. Two of the districts involved are not within the four-county area of SPEEDIER's primary responsibility. Although federal funds are not used to finance SPEEDIER work with these districts, they are included in the report.

As was explained earlier, original plans included the addition of several new, shorter-length elementary social studies programs, but the reduction in Title III funds necessitated the postponement of work with these programs until a later date. At this time there are no plans to add new elementary social studies programs to the pilots before the end of this school year.

When school administrators indicated their interest in an elementary pilot on the response card sent out in May, they were visited by SPEEDIER staff members who arranged for the participation and drew up an agreement. From this point the implementation of each elementary pilot was conducted independently. Separate descriptions of each appear below.

Taba Program

During the spring of 1969 plans were developed for beginning "full school" pilots with the Taba Program. The plans called for a self-contained pilot for the teachers from a single school as long as the number of teachers would be large enough to make the pilot practical. The cost to the district was assessed as a total package rather than at the $50 per participating teacher. The plan resulted from a contact to Dr. Myers by Frederick Kepner, Assistant Superintendent - Elementary, Wilkes-Barre City Schools, who expressed interest in having all the teachers of one school pilot the Taba Program. Dr. Myers, Mr. Kepner, and Mr. Walter Wood, Superintendent of Wilkes-Barre Schools, developed an agreement to serve the needs specified by the Wilkes-Barre administrators. Dr. Hamill approved the agreement and it was signed by Wilkes-Barre City Schools and SPEEDIER.

TABLE II

Districts Involved in Elementary Pilots

District	Grade Level	Number of Teachers	Number of Pupils
TABA			
Annville-Cleona	3,5,6	8	248
Eastern York	5	2	56
Ephrata	1,2,5,6	6	180
Lampeter-Strasburg	1,3,5	4	102
Milton Hershey	5	1	17
Spring Grove	7	1	31
Penn Manor	1-5	12	305
Hempfield	1-6	18	506
Wilkes-Barre	1-6	17	544
Tarrytown	4-6	12	500
MINNESOTA			
Annville-Cleona	5	3	86
Cocalico	K-3	32	955
GREATER CLEVELAND			
Derry Township	1,2	17	411
ELCO	K-6	40	1180
SENESH			
Susquehanna Township	2	2	46

While the agreement with Wilkes-Barre was being developed, Dr. Myers was also contacted by David Durfee, Social Studies Coordinator, The Public Schools of the Tarrytowns, New York, who indicated an interest in the Taba Program and asked to visit some of the SPEEDIER pilot teachers and to discuss a possible working relationship between Tarrytown and SPEEDIER. Mr. Durfee and several teachers visited the area during May and discussed general plans for an agreement. Discussions continued by phone and an agreement was developed that followed the plan designed for Wilkes-Barre.

SPEEDIER also presented the "full school" plan to the districts of the four counties. Several districts expressed interest and eventually two approved participation under the plan for 1969-1970. Full Taba schools were begun by Hempfield School District at the Rohrertown Elementary School and by Penn Manor School District at the Conestoga Elementary School. In the case of the Penn Manor agreement, financial shortages became critical, and the entire plan was laid aside for several weeks during the summer. But, because of a change in tax base within the district, funds were secured.

Six other school districts chose to add new teachers to the Taba pilot in smaller numbers than would be necessary under the "full school" plan. There teachers have worked together in a group referred to as the "Miscellaneous Taba Pilot." General plans in working with this group are the same as those used during the first year of pilot operation except for the charge of $50 per participating teacher.

Prior to the beginning of the pilots in mid August, Dr. Myers attended a two-week workshop for the trainers of Taba teachers conducted by the Institute for Staff Development at the University of Colorado, Boulder, Colorade. A subsequent two-week session will be held in January at El Paso, Texas.

Introductory Workshop

Initial five-day workshops for the five Taba groups were conducted during the last two weeks of August and early September. Trainers for the sessions were Dr. Myers, Mr. Baer, Lyle Ehrenberg, Director of the Institute for Staff Development, and Dr. John D. McCulay, Professor of Education, Pennsylvania State University.

Each workshop included an overview of the Taba Social Studies Curriculum, specific training in Taba teaching strategies, and instruction on the nature of behavioral objectives and their use with the Taba Program. The schedule for each of the five groups was as follows:

Tarrytown	August 21, 22, 23, 25, 26
Miscellaneous Group	August 25-29
Wilkes-Barre	August 26-29, September 27
Rohrerstown School	August 27, 28, 29 September 3, 6
Conestoga School	September 3, 6, 13, 20 October 4

Pilot Implementation

Introduction of Materials

Introduction of Taba materials followed the same general plan as in 1968-1969. Because the lead time was longer than in the first year, few problems were encountered. Both Wilkes-Barre and Tarrytown Schools asked that additional sets of materials be purchased for their teachers beyond those originally agreed upon. SPEEDIER complied immediately and the additional materials were delivered to the teachers within a few weeks.

For districts within the four counties, special agreements were made for the securing of audio-visual materials required by the program. The supplying of these materials was handled by Mrs. Suzette Arnold, Mrs. Mary Caldwell, Miss Caroline Sixsmith, and Mrs. Joan Smith of the SPEEDIER staff.

Because of the nature of the Taba Program, the development of teacher familiarity with the program requires several weeks. The process seems to be developing as expected.

Refining of Teaching Techniques -- First-Year Teachers

For the Taba Program the refinement of teaching techniques is not clearly separated from the Introduction of Materials phase. Mr. Baer has been visiting the Taba teachers and saw virtually all of them at least twice, and many of the miscellaneous group three times before Christmas. This does not include the Tarrytown

group for whom SPEEDIER does not have a visiting consultant. In this case, David Durfee functions in the role which Mr. Baer handles for the other groups. In general, the refinement of teaching techniques is proceeding as expected. A large majority of the teachers appear to be satisfied with their own progress although there are a few who are somewhat anxious about their understanding of the Taba teaching strategies and their ability to handle them in a classroom.

All of the five groups have had two full days of workshop sessions following the initial introductory workshop. In some cases these sessions were five and one-half to six hour sessions held for an entire day. In other cases they are two and one-half to three hour sessions held in successive weeks. Three more sessions of five and one-half hours each (or six, two and one-half to three hour sessions) will be scheduled for each group in February, March, and April. All of these sessions will continue to emphasize the refinement of teaching strategies.

In addition to the workshops and to Mr. Baer's visiting of classes and providing feedback information to the teachers, the Taba teachers have been asked to tape record their classes and to analyze the tapes using two analysis forms that are included within the in-service program. Mr. Baer has been critiqueing lesson plans, the lessons that he sees, plus the two analysis forms completed by the teachers. He will do the same type of analysis for each of the four thinking tasks in the Taba Program. At the present time we expect the analysis for Concept Development (the first thinking task) to be completed by the end of January and the analysis for Interpretation of Data (the second task) to be completed by the end of February. The other two tasks will be dealt with in the future workshops to be held during the year and analysis will follow those workshops.

Refinement of Teaching Techniques -- Second-Year Teachers

The refinement of teaching techniques for second year teachers does not follow a specific plan. Several teachers who had worked with the program last year are working directly in the pilot for the new teachers. These people teach in school districts where there was only one to two teachers working in the program last year and where there has been a rather significant increase for the second year.

Early in the school year all second-year Taba teachers were asked to respond to a questionnaire concerning the type of assistance they would like to have from SPEEDIER in 1969-1970. Those that did not indicate that they wanted to participate directly with the new pilot expressed interest in maintaining contact with SPEEDIER when they felt they were in specific need of help. Mr. Baer has worked with several of these teachers when called upon to do so and has visited many of them informally. Present plans call for him to visit all second-year Taba teachers during January and February.

Dissemination

As in the case of the Fenton Program, the dissemination stage of all elementary pilots for first-year teachers will be conducted during the second half of the year. The procedures used will be similar to those used in 1968-1969. However, already this year a significant number of requests for visits to elementary teachers, particularly Taba teachers, have been received by SPEEDIER; and visitations have been scheduled. Inquiries concerning the Taba pilot have been received from Upper Merion School District, King of Prussia, Pennsylvania; Scarsdale, New York; Rye Neck, New York; and other school districts within and outside the four-county area.

For the second-year elementary pilot teachers dissemination will be less formal. In general, visits to second-year teachers will be arranged by the districts involved, but SPEEDIER will work with the districts to arrange visits when it is requested to do so.

Critical Evaluation

At the present time tentative plans for a critical evaluation for both first and second-year elementary social studies teachers include discussions with the teacher and administrators of each of the pilot districts concerning their plans for next year. The exact nature of these discussions will be determined later in the year by the implementation directors for each pilot. The Curriculum Analysis System developed by the Social Science Education Consortium might be used.

There are tentative plans to invite the fourth-grade Taba teachers to develop a bibliography for Pennsylvania for the Taba Program. The material that these teachers are now using does not have a bibliography, and they and their administrators have been selecting and ordering their own classroom materials to fit the activities suggested in the teaching guides. If finances permit, this part of the pilot will be scheduled in June.

Minnesota Program

Two school districts, Cocalico and Annville-Cleona, indicated interest in adding teachers to the Minnesota Program for 1969-1970. Cocalico installed the program throughout its system at the kindergarten through third-grade levels and plans to expand it through grade six in 1970-1971. Its pilot includes five elementary schools and thirty-two teachers with approximately 955 students. Three of the teachers, one in each grade, one through three, had piloted the Minnesota Program in 1968-1969. One fourth-grade teacher who worked program in 1968-1969 is also continuing this year.

Annville-Cleona added three new Minnesota teachers for 1969-1970, all in grade five. All three teachers work closely with the two fifth-grade teachers who had piloted the Minnesota Program in 1968-1969 and who are continuing to use it. Eighty-five students attend the classes of the three new pilot teachers.

The Minnesota pilot has been under the direction of three different members of the SPEEDIER staff. William R. Thomas worked with the original arrangement for the pilot for 1969-1970 and began the preliminary scheduling of the introductory workshop. In July he was replaced on the SPEEDIER staff by Mr. Charles Hostetler, who completed plans for the workshop and was in charge of the introductory workshops. Following the workshops, L. Norman Adams joined the SPEEDIER staff as Implementation Director for both the Minnesota and Greater Cleveland projects.

Introductory Workshop

The Minnesota introductory workshop for Cocalico was held on August 19 and 20 for K-3 teachers and on August 21 and 22 for teachers in grades 4-6. The sessions for the teachers in 4, 5, and 6 were general orientation meetings designed to look forward to the extension of the Minnesota Program in 1970-1971. The teachers who attended are not working directly with the program at the present time. Charles Mitsakos, Social Studies Coordinator, of the Chelmsford Public Schools, North Chelmsford, Massachusetts, and Mr. Charles Hostetler of SPEEDIER served as the workshop leaders and were assisted by Barry Miller, Curriculum Coordinator, and Paul Gensemer, Social Studies Chairman, of Cocalico. The workshop featured general orientation to the Minnesota Social Studies Program, including the rationale, objectives, teaching strategies, and the use of teacher resources. Time was also devoted to a presentation and analysis of a demonstration lesson, a teacher-prepared demonstration lessson, and a general discussion of the implementation of the program.

During the second week of school, September 8-11, four consecutive afternoons were used for one and one-half-hour meetings attended by the teachers in grades K-4. Discussions were organized and directed by Charles Hostetler with the assistance of Dr. Myers, Mr. Adams, Mr. Miller, and Mr. Gensemer. During the session the conceptual and inquiry emphases of the program were discussed and grade-level meetings were held to plan the initial lessons for the year and to discuss the first unit of the program. Some attention was also directed toward evaluation of student learning.

The three Annville-Cleona teachers attended the workshop at Cocalico on August 19 and 20. On August 21 they attended a session directed by Charles Hostetler which dealt directly with the Minnesota Program for grade five and its implementation in the Annville-Cleona elementary schools.

Pilot Implementation -- L. Norman Adams, Implementation Director

Introduction of Materials

The introduction of materials for the Minnesota Program proceeded rather smoothly. Unlike the previous year, classroom materials had been ordered far enough in advance so that the large portion of the materials were available for delivery to the teachers at the beginning of the program. The procedure for ordering and delivering the materials was the same as in 1968-1969. Special arrangements were made for the securing of audio-visual materials required by the program. The supplying of these materials, as with the Taba pilot, was handled by several members of the SPEEDIER staff. Gerald Collins, Director of Library Services, and Paul Gensemer at Cocalico aided in this process.

The development of familiarity with the Minnesota materials proceeded rather smoothly during the first several weeks of the pilot. During this time Mr. Adams visited all of the pilot teachers.

Refinement of Teaching Techniques -- First-Year Teachers

Mr. Adams has been visiting the Cocalico teachers one full day each week. The building principals with whom he works have scheduled his visitation so that he sees approximately six teachers on each visit. At the present time he has seen all of the teachers twice. During the visits he observes classes and provides feedback for the teachers concerning their performance. He has also visited the Annville-Cleona teachers twice to date.

Plans for January include the identification of particular teaching techniques and strategies to be used by the Minnesota teachers. These strategies will be discussed with the teachers at in-service days already tentatively scheduled. Mr. Adams will then look for the use of these strategies during his classroom visits and will provide criticism of them. There are plans to introduce to the teachers the technique of micro-teaching and to use it as a tool for helping them refine their use of the particular technique and strategies selected.

Refinement of Teaching Techniques -- Second-Year Teachers

Refinement of teaching techniques for second-year teachers, as for the Taba pilot, is rather informal. On the response to the questionnaire to second-year Minnesota teachers at the beginning of the year, all teachers indicated that they felt comfortable in working with the Minnesota Program and that the only area in which they felt they needed direct help was assistance in procuring additional student materials. SPEEDIER has provided them with consultation assistance when requested. Each of the teachers will be visited during January and February.

Dissemination and Critical Evaluation

The dissemination and critical evaluation stages of the Minnesota pilot for first-year teachers will be conducted during the second half of the year. The procedures used with both the first and second-year teachers will be similar to those described in the dissemination and critical evaluation sections of the Taba section of this report.

Greater Cleveland Program

The Greater Cleveland Social Studies pilot was expanded in the Eastern Lebanon County School District to include all kindergarten through third-grade teachers plus all fourth, fifth, and sixth-grade teachers in the Schaefferstown Elementary School, one of the six elementary schools in the system. Altogether there are forty participating teachers with approximately 1180 students. Three of the teachers are participating in the program for the second year. The same program is also being used district-wide by all the first and second-grade teachers of the Derry Township School District. Nine first-grade and eight second-grade teachers are involved. Two of the teachers are working with the program for the second year and two others had used the Minnesota Program during 1968-1969.

As in the case with the Minnesota Program, the initial plans for the inclusion of these districts were made by Mr. Thomas, When Mr. Hostetler succeeded Mr. Thomas, he continued with the plans and was in charge of the introductory workshop. Following the introductory workshops, Mr. Adams assumed the role of Implementation Director.

Introductory Workshop

On August 26-28 the introductory workshop for the ELCO teachers was held. Half-day sessions were conducted on August 26 and 28 with a full-day session on August 27. The workshop was organized and directed by Charles Hostetler of SPEEDIER with Miss Marlene Sell of the Educational Research Council of American serving as consultant on August 27. The workshop featured an orientation to the Greater Cleveland rationale, objectives, teachers' guides, pupil materials, and teaching strategies. Demonstration lessons were presented by Miss Sell and Mr. Hostetler, and grade-level meetings to work with the materials and develop lesson plans were held. The introductory workshop for Derry Township was held on September 12 and 13. Mr. Hostetler was in charge and Mr. Adams and Dr. Myers assisted. Miss Elaine Wrisley of the Educational Research Council of America served as consultant on September 12. The workshop was planned to include an orientation to the Greater Cleveland Program, its rationale, objectives, teacher guides, and student materials. Grade-level meetings to discuss course materials and teaching strategies were also planned. The September 12 meeting was held as scheduled, but only seven of the seventeen teachers attended the session planned for September 13 because of a disagreement with their administrators concerning the scheduling of the meeting on Saturday. Mr. Hostetler chose not to conduct the session as planned. He and Mr. Adams did meet informally with the seven teachers and two administrators present for approximately one hour.

Pilot Implementation -- L. Norman Adams, Implementation Director

Introduction of Materials

All Greater Cleveland materials were on hand for the start of the school year and there was very little difficulty in having the teachers understand them and begin to use them in the classroom. Mr. Adams arranged to work with the ELCO schools one day each week observing classes and providing teachers with feedback information concerning the lessons he viewed. The elementary principal and assistant elementary principal within the district arranged for the scheduling of his classroom visits and helped in planning the implementation activities.

Mr. Adams used a similar plan for observations for Derry Township. However, difficulties arose concerning the scheduling of the visits and during the period September 25 through October 9 only nine teachers were visited. On October 15 a short meeting was held with all the pilot teachers where Mr. Adams attempted to clarify his role as the consultant in implementing the Greater Cleveland Program at Derry Township. Specific reference was made to the difficulty in scheduling his visits. After the conclusion of the meeting, the elementary supervisor for the district indicated to Mr. Adams that various internal problems existed which he felt he needed to deal with internally before further visitations by a SPEEDIER representative would be fruitful. The difficulties centered around the reluctance on the part of some teachers to have a classroom visitor from SPEEDIER observe their teaching.

During the following week, Mr. Adams and Dr. Hamill of SPEEDIER met with administrators of Derry Township, and the elementary supervisor indicated that he wished to call a meeting with his own pilot teachers on November 7 to work out the internal problems. It was suggested at that time that SPEEDIER personnel would be contacted for their assistance after that meeting was held. After the meeting, SPEEDIER was informed that Derry Township would handle their own supervision of the pilot teachers but would attempt to arrange in-service workshops and grade-level meetings under the direction of Mr. Adams. Grade-level meetings were requested by Derry Township for December 3 and 4, but because of previous commitments Mr. Adams was unable to conduct them at that time. At the present time, the people within Derry Township are attempting to schedule meetings for January.

Refinement of Teaching Techniques -- First-Year Teachers

Since very little has been done with the teachers at Derry Township since the initial visits by Mr. Adams, efforts at the refinement of teaching strategies has not begun. SPEEDIER plans to provide assistance to the district as requested by their administrators, but specific plans on how the refinement of teaching techniques will be pursued at this point remains in question.

At ELCO Mr. Adams has continued his weekly visits and is in the process of developing an in-service day program to be held on January 12. All teachers will be involved during the three-hour morning session and during part of the afternoon the K-3 teachers will discuss the next steps in using the Greater Cleveland Program. Details of the agenda have not been completely formulated however.

Further plans for the refinement of teaching strategies and techniques by the ELCO teachers include the identification of particular strategies and techniques that will be emphasized during the spring of the year. It is expected that demonstration video-tapes of teachers working with particular new social studies strategies will be used. In addition classroom video taping, micro-teaching, classroom interaction analysis, and the use of behavioral objectives will be employed to enable the teachers to analyze their own teaching performance and improve their use of particular strategies. The extent to which these activities will be used will depend upon the amount of in-service time that can be provided by the district.

Mr. Adams will continue his weekly visits to the district for classroom observation, will continue the consultation with individual teachers, and will begin to develop grade-level and single-school meetings with the pilot teachers.

Refinement of Teaching Techniques -- Second-Year Teachers

The refinement of teaching techniques by second-year teachers has been informal. In response to questionnaires to participating teachers from last year, all of the teachers indicated that they felt confident to continue on their own with only periodical assistance from SPEEDIER when they request it. One district, Northeastern School District in York County, developed a direct relationship with the Educational Research Council of America for their own in-service training. Plans presently call for the visitation of all second-year teachers during January and February.

Dissemination and Critical Evaluation

The dissemination and critical evaluation stages of the Greater Cleveland pilot for first-year teachers will be conducted during the second half of the year. The procedures used will be similar to those used in 1968-1969. The general plan for both first and second-year Greater Cleveland teachers will follow the same pattern as that described in the Taba section of this report.

Senesh Program

The second year of the Senesh Program included only two new teachers. Several districts had indicated interest in expanding the program but all chose not to do so before agreements were developed. Two major reasons were responsible for this change: apprehension on part of some teachers to having outside observers in their classes and the charge of $50 per teacher to work with SPEEDIER. Two districts that expanded the use of the Senesh Program felt that they would be able to proceed with the implementation by using their first-year teachers as consultants rather than working directly with SPEEDIER personnel.

Because only two new teachers were involved, a general workshop was not held. Mr. Hostetler, when still employed full-time by SPEEDIER, made preparations for working with these teachers directly. After he discontinued full-time work with SPEEDIER, he assumed the responsibility of working with the two Senesh teachers as a part-time employee.

Pilot Implementation -- Charles Hostetler, Implementation Director

Introduction of Materials

The actual introduction of Senesh materials into the district was handled by the district personnel with little assistance from SPEEDIER. Since most of the books were already on hand and those that had to be ordered were done with a single order this process was rather easy. The area sales representative for Science Research Associates, which publishes the Senesh Program, met with the teachers at the request of the district to explain the program to them.

Refinement of Teaching Techniques -- First-Year Teachers

Mr. Hostetler is now working with the two teachers on an individual basis emphasizing the refinement of the teaching techniques that they employ with the program. Because he is working in a one-to-one situation, he is able to make very specific and individualized suggestions for each of his meetings. He is meeting with each of the teachers approximately one-half day each month.

Refinement of Teaching Techniques -- Second-Year Teachers

All of the second-year teachers indicated in their response to the questionnaire at the beginning of the year that they were able to continue with the Senesh Program with only consultation assistance from SPEEDIER when requested. To date the requests for assistance have been minimal. SPEEDIER does plan to have a visitor contact all of the second-year Senesh teachers during January and February.

Dissemination and Critical Evaluation

The dissemination and critical evaluation stages of the Senesh pilot for both first and second-year teachers are incomplete as of this date. Because of the small number and the very informal contact between the teachers and SPEEDIER, it is questionable at this time if SPEEDIER will proceed with formalized dissemination and critical evaluation stages. The decision on this matter will be made later by the SPEEDIER staff in consultation with district administrators and Mr. Hostetler.

Section C

Research Report on Social Studies Pilots -- 1968-69

RESEARCH REPORT ON SOCIAL STUDIES PILOTS -- 1968-1969

Introduction

This report describes the results of the testing program that was developed to assess the effects of five social studies pilot programs on teachers and pupils. These pilot programs were instituted to give educators in the four counties of Dauphin, Lancaster, Lebanon, and York in Pennsylvania some alternative programs to those they have been using. The five programs included four on the elementary and intermediate level and one for the secondary school. The programs included:

1. The Senesh Social Science Program for grades 1-3, published by Science Research Associates, Chicago, Illinois.

2. The Greater Cleveland Social Science Program developed by the Educational Research Council of America, Cleveland, Ohio, grades 1-8.

3. The Taba Social Studies Curriculum developed by Hilda Taba at San Francisco State College, San Francisco, California, grades 1-3 and 5-6.

4. The University of Minnesota Project Social Studies Program developed by Edith West at the University of Minnesota, Minneapolis, Minnesota, grades 1-8.

5. The Fenton Social Science Program developed by Edwin Fenton at the Carnegie-Mellon University, Pittsburgh, Pennsylvania, published by Holt, Rinehart and Winston, New York, New York, grades 9-12.

Problem and Its Significance

The basic problem was to develop an assessment procedure to measure the change in scores on selected instruments used with the pilot groups and control groups (both teachers and students). The desire was to determine the effect of the various programs on both pupils and teachers.

Sometimes new curricular programs are developed and institutionalized without proper assessment. The significance of this problem lies in an attempt to ascertain, by use of standardized instruments, if teachers and pupils are differentially affected as a result of working with the various pilot programs.

Hypotheses

The following statistical hypotheses were used to analyze the test data for students and teachers.

1. There are no significant differences between the pilot students and the control students in grades 1-3 on change scores on the Five Faces Attitude Inventory and the Primary Social Studies Test.

2. There are no significant differences between the pilot students and the control students in grades 4-8 on change scores on the Sequential Test of Educational Progress (STEP).

3. There are no significant differences between the pilot students and the control students in grades 9-12 on change scores on the Seqential Test of Educational Progress (STEP), Critical Thinking Test, Inventory of Interpersonal Values, Test of Economic Understanding, Principles of Democracy Test, and The World History Test.

4. There are no significant differences between the pilot teachers and the control teachers on change scores on the Rokeach Dogmatism Scale, Survey of Interpersonal Values, selected areas of verbal behavior, selected areas of self perception, and selected discrepancy scores between observed behavior and perceived behavior.

5. There are no significant differences between the Fenton teachers and the control teachers on the original total discrepancy scores.

Procedure

Subjects

The sample used in this study consists of teachers on the elementary and secondary level in the four counties of Dauphin, Lancaster, Lebanon, and York in Pennsylvania. The teachers were selected by various methods by the chief school administrators who were interested in working with SPEEDIER in a social studies pilot program. The elementary and intermediate pilots, grades 1-8, involved 51 teachers. On the secondary level, grades 9-12, twelve teachers were involved in the Fenton program.

Along with the pilot groups, control teachers and their students were randomly selected from districts in the area not involved in one of the pilots. Sixteen elementary and intermediate teachers and their students were selected as controls plus eleven secondary teachers and a random sample of their students as controls.

Insturments

The following instruments were used with the students at the indicated grade levels.

Grade Level	Instrument
1-3	1. Ten item modification of the Five Faces non-verbal Attitude Scale developed by Scott and Jeffrees, The Board of Public Education, Pittsburgh, Pennsylvania 15213.
1-3	2. Primary Social Studies Test, Houghton Mifflin Company, Boston, Massachusetts.
	3. Sequential Test of Educational Progress, Social Studies, Educational Testing Service, Princeton, New Jersey.
4-6	Form 4B
7-9	Form 3A
10-12	Form 2A

9-12	4. Watson-Glaser Critical Thinking Appraisal, Harcourt, Brace and World, Inc., New York, New York.
9-12	5. Survey of Interpersonal Values by Gordon, Science Research Associates, Chicago, Illinois.
9,11,12	6. Test of Economic Understanding, Science Research Associates, Chicago, Illinois. Form A
9,11,12	7. Principles of Democracy Test, Science Research Associates, Chicago, Illinois.
10,11	8. World History Test, Educational Testing Service, Princeton, New Jersey. Form B

The following instruments and appraisals were used with all teachers:

1. The Rokeach Dogmatism Scale, Form E, 40-item scale, by Milton Rokeach.

2. Self-Perception Inventory developed by K. M. McCall. (This is a modification of an inventory developed by N. Furst, Temple University, Philadelphia, Pennsylvania.)

3. Survey of Interpersonal Values, Science Research Associates, Chicago, Illinois.

4. Fourteen Category Modification of the Flanders System of Interaction Analysis. (This was used to describe the verbal teaching behavior.)

Method of Measurement

Student instruments 1 through 8 were administered at the beginning and end of the program. This involved either a year's pre-post procedure for items 1-5 and 8 while a one semester time span was used for the Fenton program tested by 6 and 7. The Fenton programs in Economics and Political Systems are only designed for a single semester of secondary school.

The teachers were assessed in the beginning of the school year and again near the end of the year.

As the teachers were audio taping their lessons, they were asked to fill out the Self-Perception Inventory. Using the lesson as analyzed by the Fourteen Category System and the perceived percentages, a discrepancy score was determined in five areas. This score was calculated by finding the absolute difference between the percentage of time spent in each area according to the analysis of the behavior and the corresponding self-perception percentage. The five areas compared were: Total Teacher Talk (categories 1-7), Total Student Talk (categories 8-10), Teacher Indirect Influence (categories 1-4b), Teacher Direct Influence (categories 5-7), and Teacher Lecture (category 5). These five absolute differences were then added and a total discrepancy score was obtained for each teacher.

Dependent Variables

The dependent variables included behavior change, perception change, change in discrepancy score, and change in test scores. To simplify the description of the dependent variables relating to perception, behavior, and discrepancy score the following symbols were used:

P_1 = Self-perception in each area before treatment.

P_2 = Self-perception in each area after the treatment.

B_1 = Analyzed behavior in each area from initial taping.

B_2 = Analyzed behavior in each area from final taping.

S_1 = Discrepancy score in each area before treatment as determined by $|P_1 - B_1|$

S_2 = Discrepancy score in each area after treatment as determined by $|P_2 - B_2|$

ΔP = Change in perception in each area calculated by

$$\left|P_2 - P_1\right|$$

ΔB = Change in behavior in each area calculated by

$$\left|B_2 - B_1\right|$$

ΔS = Change in discrepancy score in each area calculated by $S_1 - S_2$

ΔS_T = Total change in discrepancy score calculated by

$$\Sigma\left[\left|P_1 - B_1\right|\right] - \Sigma\left[\left|P_2 - B_2\right|\right]$$

S_T = Total pre-discrepancy score calculated by ΣS_1 for the five areas

S_{TP} = Total post-discrepancy score calculated by ΣS_2 for the five areas

Behavior Change. The change in behavior, ΔB, was determined for each of the five areas of interest for each of the teachers in the following manner:

$$\Delta B = \left|B_2 - B_1\right|$$

This number was assigned a positive value if the following was true:

$$\left|B_1 - P_1\right| > \left|B_2 - P_1\right|$$

A positive value shows that the subject's behavior after the treatment (B_2) more closely approached his original perception (P_1) than did his pre-treatment behavior (B_1). A negative value indicates that his post-treatment behavior diverged more from his original perception than did his pre-treatment behavior.

Perception Change. ΔP was determined for each of the five areas of interest in the following manner:

$$\Delta P = \left|P_2 - P_1\right|$$

This value was positive if:

$$\left|P_1 - B_1\right| > \left|P_2 - B_1\right|$$

A positive value shows that the subject's perception after the treatment (P_2) more closely approached his original behavior (B_1) than did his pre-treatment perception (P_1). A negative value indicates that a subject's post-treatment perception diverged more from his original behavior than did his pre-treatment perception.

Discrepancy Score. An original and final discrepancy score was determined for each of the five areas in the following manner:

$$S_1 = \left|P_1 - B_1\right| \quad \text{and} \quad S_2 = \left|P_2 - B_2\right|$$

Pre and post-treatment discrepancy scores were calculated by adding all the five S_1 and five S_2 values. A change in this discrepancy score, ΔS, was determined for each of the five areas of interest in the following manner:

$$\Delta S = S_1 - S_2$$

A positive value showed that discrepancy in that area was reduced during the experiment.

Total Discrepancy Score Change. ΔS_T, was calculated in the following manner:

$$\Sigma\left[\left|P_1 - B_1\right|\right] - \Sigma\left[\left|P_2 - B_2\right|\right]$$

Percent Total Discrepancy Score Change was calculated by dividing total ΔS_T by S_T then changing to percent in the following manner:

$$\%\Delta S_T = \frac{\Delta S_T}{S_T} \times 100$$

Audio Taping

The teachers were asked to tape two hours of social studies verbal interaction. From this tape four five-minute randomly sampled segments were coded. This procedure was followed in both fall and spring.

The tapes were analyzed by a reliably trained coder whose consistency was checked by using a single tape with a code re-code sequence four weeks apart. Using a chi-square contingency table, the coder did not differ significantly from his first set of tallies at the .01 confidence level. This showed that the coder viewed the lesson the same on both analyses.

Analysis

The hypotheses presented in an earlier section of this paper were tested statistically by using a one-way analysis of variance. A Monroe EPIC 3000 was used to aid with the computations. Where significant differences occurred, the Scheffe' Method (Ferguson, 1966, pp. 296-297) was used to determine which differences in mean values were significantly different.

Results

Change in Student Test Scores

Table 1 indicates the effects of the various pilot programs on the change score on the Primary Social Studies Test for grade 1. Significant effects for the treatments were obtained ($F = 6.35$, df 4/332, $p < .01$). The use of the Scheffe' method found significant differences in the mean score change between the controls and the Minnesota group at the .05 level, between the controls and the Senesh group at the .05 level, and between the controls and the Cleveland group at the .01 level. In all cases the control change was less than the experimental (pilot) groups.

Table 1

Analysis of Variance Between First Grade Pilot Students and Control Students on Change Score on the Primary Social Studies Test

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	876	4	219
Within	11,455	332	34.5
			F= 6.35*

* α .01 (4, 200) = 3.41

Table 2 indicates the effects of the various pilot programs on the change score on the Primary Social Studies Test for grade 3. Significant effects for the treatments were obtained ($F = 5.49$, df 4/299, $p < .01$). The use of the Scheffe' method found that the mean change in score of the Taba students was significantly less than the controls at the .01 level.

Table 2

Analysis of Variance Between Third Grade Pilot Students and Control Students on Change Score on the Primary Social Studies Test

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	611	4	152.7
Within	8309	299	27.8
			F= 5.49*

* α .01 (4, 200) = 3.41

All other test results on grades 1-8 with change score on the Five Faces Attitude Inventory, Primary Social Studies Test, and STEP Test form 3A and 4B, were not statistically significant.

Table 3 indicates the effects of the Fenton program on the change score on the STEP test for grade 9. A significant difference in mean change score was obtained ($F = 20.0$, df 1/129, $p < .01$). The Fenton students showed a greater positive change than the control group.

Table 3

Analysis of Variance Between Ninth Grade Fenton Students and Control Students on Change Score on the STEP Test Form 3A

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	2546	1	2546
Within	16,380	129	127
			F= 20.0*

*$C.01$ (1, 125) = 6.84

Table 4 indicates the effects of the Fenton program on the change score on the Critical Thinking Appraisal for the ninth grade. A significant difference in mean change score was obtained ($F = 13.6$, df 1/128, $p < .01$). The Fenton students showed a smaller positive change than the control group.

Table 4

Analysis of Variance Between Ninth Grade Fenton Students and Control Students on Change Score on Critical Thinking Appraisal

Sequence of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	1330	1	1330
Within	12,468	128	97
			F= 13.6*

*α.01 (1, 125) = 6.84

Table 5 indicates an analysis of pre-test scores on the Critical Thinking Appraisal taken by the ninth grade students. A significant difference was obtained on the original mean scores ($F = 18.5$, df 1/126, $p < .01$). The Fenton group scored significantly higher on the pre-test.

Table 5

Analysis of Variance Between Ninth Grade Fenton Students and Control Students on Pre-Test Scores on the Critical Thinking Analysis

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	1198	1	1198
Within	8824	136	65
			F= 18.5*

*α.01 (1, 125) = 6.84

Table 6 indicates the effects of the Fenton program on the change score on the Test of Economic Understanding for the ninth grade students. A significant difference in mean change score was obtained ($F = 17.4$, df 1/103, $p < .01$). The Fenton students showed a greater positive change.

Table 6

Analysis of Variance Between Ninth Grade Fenton Students and Control Students on the Test of Economic Understanding

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square	
Between	368	1	368	
Within	2283	103	21	
				F= 17.4*

*$\mathcal{L}$.01 (1, 100) = 6.90

Tables 7, 8, and 9 indicate the effects of the Fenton program on the change score on the Survey of Interpersonal Values for the ninth grade students. Table 7 shows a significant difference in mean change score for conformity ($F = 18.9$, df 1/131, $p < .01$). The Fenton students changed to place less value on conformity. Table 8 shows a significant difference in mean change score for benevolence ($F = 16.6$, df 1/133, $p < .01$). The Fenton students changed to place less value on benevolence. Table 9 shows a significant difference in mean change score for support ($F = 7.60$, df 1/131, $p < .01$). The Fenton students changed to place more value on support. A detailed description of the values conformity, benevolence, and support can be found in the manual for Survey of Interpersonal Values.

Table 7

Analysis of Variance Between Ninth Grade Fenton Students and Controls on the Conformity Measure of the Survey of Interpersonal Values

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	390	1	390
Within	2,701	131	21
			F= 18.9*

*α .01 (1, 125) = 6.84

Table 8

Analysis of Variance Between Ninth Grade Fenton Students and Controls on the Benevolence Measure of the Survey of Interpersonal Values

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	497	1	497
Within	3984	131	30
			F= 16.6*

*α .01 (1, 125) = 6.84

Table 9

Analysis of Variance Between Ninth Grade Fenton Students and Controls on the Support Measure of the Survey of Interpersonal Values

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	148	1	148
Within	2,556	131	20
			F= 7.60*

*α.01 (1, 125) = 6.84

Table 10 indicates the effects of the Fenton program on the change score on the Test of Economic Understanding for eleventh grade students. A significant difference in mean change score was obtained (F = 111.8, df 1/86, $p < .01$). The Fenton students showed a greater positive change.

Table 10

Analysis of Variance Between Eleventh Grade Fenton Students and Controls on the Test of Economic Understanding

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	2258	1	2258
Within	1738	86	20.2
			F = 111.8*

*α.01 (1,100) = 6.90

Table 11 indicates the effects of the Fenton program on the change score on the STEP test for the eleventh grade students. A significant difference in mean change score was obtained ($F = 5.02$, df 1/81, $p < .01$). The Fenton students showed a greater positive change.

Table 11

Analysis of Variance Between Eleventh Grade Fenton Students and Controls on the STEP Test

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	185	1	185
Within	2987	81	36.9
			F= 5.02*

*$\mathcal{L}$.05 (1, 80) = 3.96

Table 12 indicates the effects of the Fenton program on the change score on the Test of Economic Understanding for the twelfth grade students. A significant difference in mean change score was obtained ($F = 15.4$, df 1/92, $p < .01$). The Fenton students showed a greater positive change.

Table 12

Analysis of Variance Between Twelfth Grade Fenton Students and Controls on the Test of Economic Understanding

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	789	1	789
Within	4703	92	51
			F= 15.4*

*$\mathcal{L}$.01 (, 100) = 6.90

Table 13

Analysis of Variance Between Twelfth Grade Fenton Students and Controls on the Principles of Democracy Test

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	439	1	439
Within	4,747	93	51
			F= 8.6*

*α .01 (1, 100) = 6.90

Change in Teacher Scores

On all measures used for the teachers, grades 1-8, there were no significant differences in any mean change score.

Table 14 indicates the effects of the Fenton program on the Original Total Discrepancy Score of the Fenton teachers. A significant difference was obtained in the mean of the Original Total Discrepancy Score ($F = 6.36$, df 1/19, $p < .05$). The Fenton teachers had less discrepancy between their original perception and their original behavior.

Table 14

Analysis of Variance Between Fenton Teachers and Controls on Original Total Discrepancy Score

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	18,139	1	18,139
Within	54,193	19	2,852
			F= 6.36*

*α .05 (1, 19) = 4.38

Table 15 indicates the effects of the Fenton program on the change in discrepancy score in the area of teacher lecture. A significant difference was obtained in the mean change in teacher lecture discrepancy score ($F = 5.76$, df 1/19, $p < .05$). The Fenton teachers discrepancy score related to their lecturing changed less than the controls.

Table 15

Analysis of Variance Between Fenton Teachers and Controls on Change in Discrepancy Score in Teacher Lecture

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	1,631	1	1,631
Within	5,384	19	283
			F= 5.76*

*α.05 (1, 19) = 4.38

Table 16 indicates the effects of the Fenton program on the change in behavior score in the area of teacher indirect influence. A significant difference was obtained in the mean change in teacher indirect influence behavior ($F = 13.4$, df 1/19, $p < .01$). The Fenton teachers behavior changed more from their original perception than the control.

Table 16

Analysis of Variance Between Fenton Teachers and Controls on Change in Teacher Behavior in the Area of Indirect Influence

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square
Between	1085	1	1085
Within	1543	19	81
			F= 13.4*

*α.01 (1, 19) = 8.18

Summary

The results of the analysis of student instruments indicates that on the 1-8 grade levels significant differences in change score occurred on only the first and third grade levels. On the first grade level on the Primary Social Studies Test, the Minnesota group scored a greater change than the control at the .05 level, the Senesh group scored a greater change than the control at the .05 level, and the Cleveland group scored a greater change than the control at the .01 level. In all cases, the control changed less than the pilot groups. On the third grade level the Taba pupils scored a significantly smaller change than the control group on the Primary Social Studies Test.

The students in the Fenton program, grades 9-12, showed the following significant changes over the controls at the levels and on the instruments listed:

Ninth Grade Results

1. The Fenton students showed a greater positive change at the .01 level on the STEP Social Studies Test, Form 3A.

2. The Fenton students showed a smaller change at the .01 level on the Critical Thinking Appraisal.

3. The Fenton students showed a greater positive change at the .01 level on the Test of Economic Understanding.

4. The Fenton students showed a greater change on the Survey of Interpersonal Values in the following areas:

   A. Fenton students changed to value conformity less at the .01 level.

   B. Fenton students changed to value benevolence less at the .01 level.

   C. Fenton students changed to value support more at the .01 level.

Eleventh Grade Results

1. The Fenton students showed a greater positive change at the .01 level on the Test of Economic Understanding.

2. The Fenton students showed a greater positive change at the .05 level on the STEP Social Studies Test, Form 2A.

Twelfth Grade Results

1. The Fenton students showed a greater positive change at the .01 level on the Test of Economic Understanding.

2. The Fenton students showed a greater positive change at the .01 level on the Principles of Democracy Test.

The teachers showed significant differences and changes in their scores only in the ninth through twelfth grade group using the Fenton program.

1. The Fenton teachers showed significantly less discrepancy (at the .05 level) between their original behavior. This means that they were more aware of their original behavior than the control group.

2. The Fenton teachers showed a smaller change than the controls in discrepancy score for teacher lecture at the .05 level. This means that the discrepancy between teacher lecture and perceived lecture changed less for the Fenton teachers.

3. The Fenton teachers' behavior in the area of indirect influence changed more than the controls at the .01 level. This means that the Fenton teachers behavior diverged more than the controls from their original perceptions of their behavior.

The implications of these results will be discussed in the next section.

Implications and Conclusions

Student Instruments, Grades 1-8

Hypothesis number one had to be rejected with regard to the Primary Social Studies Test on the first and third grade levels. On the first grade level the elementary control group showed the lowest mean change score. Even though the Taba first grade showed a greater mean change score it was not enough to be statistically significant. The other three pilot groups (Senesh, Minnesota and Greater Cleveland) were significantly higher in mean change score at the .05, .05, and .01 levels respectively. Based on this result, it can be said that the students in the Greater Cleveland, Senesh, and Minnesota programs increased the level of their performance due to receiving more of the content measured by this particular instrument.

The second grade level revealed no significant difference in mean change score on the Primary Social Studies Test. No apparent trend appeared in a comparison of the mean scores.

The third grade level and only statistically significant difference in mean change score on the Primary Social Studies Test appeared between the Taba group and the controls. The Taba group scored a smaller mean change at the .01 level. The other three, even though not statistically significant, were all lower than the control. This result could show, that since the Taba program is technique oriented, the students did not receive as much content usually included on the third grade level. The teachers were probably more concerned with method than content.

The Five Faces Attitude Inventory showed no significant difference in mean change scores on either the first, second, or third grade level. A non-statistical trend appears when the mean change scores on each grade level are calculated. The change in positive attitude toward school decreases with increasing grade level. It may be that the positive attitude toward school decreases as students progress through the system.

Hypothesis number two can be accepted across all grade levels from four to eight. There were no statistically significant differences between mean change scores of the STEP Social Studies Test, Form 4B, for any pilot program over the controls for any grade level. A trend was evident. At each level the mean

change scores of the pilot groups were either the same or slightly greater than the controls. This indicated that the pilot students change in achievement on the skills and content tested by this instrument compare favorably with the controls.

Student Instruments, Grade 9-12

Hypothesis number three had to be rejected in several measures. On the STEP Test, Form 3A for grade 9 and 2A for grade 11, the Fenton students scored significantly greater changes in mean score at the .01 level (grade 9) and the .05 level (grade 11). The tenth grade showed the Fenton group slightly higher while in the twelfth grade the Fenton students were slightly lower. These results tend to support the statement that the Fenton students in this experiment did as well as or better than the controls. The Fenton students change in proficiency, on the items measured by this instrument, was better than the controls on the ninth, tenth, and eleventh grades and only slightly less than the controls at the twelfth grade. The program had an over-all positive effect in areas measured by the STEP instrument.

The Critical Thinking Appraisal showed the ninth grade control group scoring a significantly greater positive change in mean score over the Fenton group. In examining the pre-test scores it was found that the Fenton group scored significantly higher than the controls at the .01 level (Table 5, Section III). The other three grade levels show no trend in change scores. Since the controls were initially significantly lower, they had more room in which to increase. These results show that the program had no significant effect, as compared to the controls, in changing the ability of students to think critically.

On the Test of Economic Understanding the Fenton students showed statistically significant positive change scores over the controls at all levels (grades 9, 11, and 12). All of these were significant beyond the .01 level. This result showed that the Fenton students proficiency on this instrument increased at all levels more than the controls.

The Principles of Democracy Test showed the twelfth grade Fenton students in the Comparative Political Systems course making a more positive change on their mean scores than the controls at the .01 level. This

result showed that the pilot students were able to absorb more of the material that this test included.

On the Survey of Interpersonal Values significant differences in mean change scores recorded only at the ninth grade level. Changes were at the .01 level on conformity, benevolence, and support. On the first two, the Fenton students changed to value these traits less while on the latter their value increased. Trends appeared within some of the traits across the grade levels. The pilot group tended to decrease its value on conformity. On the traits of support, leadership, and recognition the pilot students tended to increase their values. No trend was evident for either benevolence or independence. Perhaps the teachers imbued their students with the idea that this program, being a break from the traditional, was good. This could have accounted for the decrease in value of being a conformist. The other three traits may have increased due to a highly positive emphasis on the part of the teachers. The statistically significant changes occurring only at the ninth grade level, could be due to the fact that this age group is very impressionable. This change might not be permanent.

Summary of Student Test Results

Based on the over-all test results, it can be said that the pilot programs on the first grade level appear to achieve more on the selected instrument and that on the fourth through eighth grade level the experimental and control groups achieved equally well. It is possible that the instruments selected did not actually test what was reported to have been the strong and innovative part of the pilots.

The Fenton program prepared the students for the STEP test as well as or better than the traditional program. The obvious strength in the Fenton curriculum appears in the area of Economics. Across all levels the experimental groups scored a greater change on the instrument. At the senior level the students scored the greatest change. This could have been due to the many discussions concerning lowering the voting age and the national election held during the school year.

The results of the Survey of Interpersonal Values tends to show that very minor changes occurred in student values suggesting this to be a very difficult area to teach and change.

Teacher Instruments

Hypothesis number four was accepted for the teachers in grades one through eight. Across all of the measures there were no significant changes in the Dogmatism Scale Survey of Interpersonal Values, selected areas of verbal behavior, selected areas of self-perception, and selected areas of discrepancy score. This tends to show that the sample of teachers involved in the study were similar in the changes caused by the study. It also showed that there was no differential effect of either the programs or the in-service workshops on the teachers. It could be any changes that might have occurred were not measured by the instruments used.

The Fenton teachers showed significant statistical differences on two measures only. The experimental group were significantly more aware of their pre-behavior than the controls at the .05 level. This was probably caused as a result of the in-service training that occurred before school started. The Fenton workshop was the only one which emphasized teacher-pupil interaction and the need for understanding and controlling it. On the measures of change in perception, behavior, and discrepancy score only one showed a statistically significant difference in change score. The Fenton teachers' discrepancy score in the area of teacher lecture changed significantly less than the controls. This indicated that the controls changed to be more aware of how much they lectured. Since the Fenton teachers were originally more aware of their total behavior this result was not unexpected.

Based on the pre-test analysis the Fenton teachers tended to change to become more traditional in their approach. On the initial data they were more non-directive, lectured less, and used more student talk than the controls. The change approached the interaction patterns of the control group. Since the first series of workshops stressed the technique and the remainder emphasized content this result seems logical. If a positive change in teacher behavior and awareness are desired, it seems advisable to incorporate technique sections in all of the workshops with the pilot teachers.

Conclusions.

Based on the test results it can be stated that the elementary and intermediate students (grades 1-8) involved in the pilot program scored as much change or more

change on the selected instruments. It could be that different techniques should be used to accurately measure what the pilot programs propose to teach.

On the secondary level, the Fenton students scored as much or more change on the instruments used. Comparative Economic Systems caused the greatest positive change in content acquisition. Change in values was negligible.

The Social Science Programs selected appear to have negligible effects on the behavior, perception, and awareness of the teachers. It seems evident from the test scores that the key to those modifications lies in the workshops held for these teachers and follow-up observations.

Section D

Language Arts Pilots

LANGUAGE ARTS PILOTS

Nebraska Curriculum

This report includes activities related to the Nebraska Curriculum implementation during the summer of 1969 and subsequent events terminating in December 1969. All other pertinent information concerning this program is contained in the previous report.

Task Force

All phases of this program are coordinated by Edward A. Teichert, Jr., Language Arts Specialist. Dr. Kendrick McCall, Behavioral Scientist, works with participating teachers in teacher awareness and has the primary responsibility for developing and improving the micro-teaching operation. Working with the television equipment is Judith Mullen, Research Assistant. Susan Beede, Implementor of Language Arts programs, works with participating teachers through classroom observations, development of additional units, and identification of additional materials for students and teachers. Dr. Paul Rice, Implementor of Language Arts programs, serves in a similar capacity on a part-time basis. All members of the task force work co-operatively in micro-teaching sessions, in-service and pre-service training sessions, in informative meetings such as P.T.A., and departmental level meetings.

In addition to the basic staff, outside resource personnel who have taught the Nebraska materials previously and grade-level teachers from the original pilot now help with training programs for new schools.

Identification of Participating Schools

During the spring, all participating schools in the four-county area were contacted about the possibility of implementing the Nebraska curriculum. Most districts contacted expressed a desire to implement the kinds of innovative programs SPEEDIER offered. Some districts already working with social science programs did not choose to undertake new language arts programs at the same time.

The financial arrangements for 1969-70 involvement was a frequent reason given for not participating. A fifty dollar per teacher cost, plus payment for all materials, and the teachers salary for in-service training was considered too much by districts participating on a partial basis. The package program for full-school participation was considered practical since it did offer maximum services at a minimal cost.

Other significant factors influencing implementation of new language arts programs included the following:

A reluctance of secondary schools to change from a traditional approach.

A reluctance to switch to any program employing linguistics.

An inability by English departments to determine a direction for their program.

Recent adoption of a published program.

Budget problems.

Development of a curriculum within the system.

Lack of the kinds of communication within a system necessary to effect such a change.

District-wide resistance to change.

Participating Districts

The following districts decided to implement the Nebraska Curriculum, or expand previously existing pilot programs.

District	No. of Teachers	Grade Level
York		
Franklin	20	1-6
Lincoln	21	1-6
Phineas Davis	5	7-9

Eastern Lancaster County		
New Holland	18	1-6
Cornwall-Lebanon		
Cornwall	17	1-5
South Lebanon	5	1-5
Ephrata		
Fulton	7	K-6
Lower Dauphin	2	4-5
Hempfield		
East Petersburg	4	3-5
Hempfield Jr. High	1	7
Hempfield High	1	10
Annville-Cleona		
Annville Elementary	3	4,6
North Annville	1	4
Cleona	1	3
Cocalico		
Schoeneck	1	3
Cocalico Jr. High	1	8
Cocalico Sr. High	4	9-12
Conestoga Valley	1	Supervisor

Over 120 are participating when the group in Conestoga Valley, being trained by the supervisor, is included. Between twenty and thirty student teachers are also involved in classroom use of Nebraska materials.

It should be noted that only two districts of the original pilot schools did not continue, although the trained teachers still use the materials, either completely or as supplemental materials.

Materials

Part of SPEEDIER's agreement with each district included ordering all materials and delivery to the schools. Cornwall-Lebanon, because of their experience as a pilot school, elected to order their own materials. Included were library books, classroom books, and Nebraska manuals for the elementary level. Secondary materials included Nebraska units, paperback core selections and supplemental materials. A more complete description of the ordering process is included elsewhere in this report.

Pre-Service Training

A five-day pre-service session was developed to train the participating districts. For most efficient use of SPEEDIER's personnel and consultants, and minimal travel for those attending, workshop sites were established in York City, Elizabethtown, New Holland, and Cornwall-Lebanon. Elizabethtown sessions were geared for schools implementing the program on a partial basis and included special presentations for secondary teachers.

Professionals were hired to host each workshop to free SPEEDIER staff members to conduct the sessions on a rotating basis.

Capitalizing on feedback received from training sessions for the pilot program and feedback from participating pilot teachers, the task force developed the following segments, each presented in a six-hour workshop.

A. "Nebraska Curriculum Overview"

Objectives:

To understand the background and rationale of the K-12 program.

To understand how the program could improve language arts skills generally and be developed to be appropriate for each district.

To become familiar with the materials: the three manuals and books on the elementary level, and the units and paperbacks on the secondary level.

To become aware of general trends in the development of programs by Project English, publishers, and other agencies.

Consultant: Edward Teichert, SPEEDIER Staff

B. "Self-Awareness"

Objectives:

To identify a need for teachers to become more aware of the ways they function as teachers.

To become aware of teacher and student verbal patterns.

To understand the process of micro-teaching and how it can be used to improve the teaching-learning process.

Consultant: Dr. Kendrick McCall, SPEEDIER Staff

C. "Linguistics and the Nebraska Curriculum"

Objectives:

To understand a general linguistics approach to language.

To relate a rudimentary knowledge of linguistics to language activities in the Nebraska Curriculum.

To become aware of the need for a new approach to the teaching of language.

Consultant: Dr. Paul Rice, Elizabethtown College

D. "Using the Nebraska Curriculum"

Objectives:

To know of specific procedures for using the program.

To know how children might be expected to respond to the program.

To understand the problems and successes of a teacher who has used the program for a full year.

Consultant: Mrs. Doris Gable, Octorara School District

E. "Creative Activities - Compositions"

Objectives:

To develop ideas which can be used to motivate students.

To use a variety of techniques and tools for stimulating student creative thought and action in the areas of dramatics, and oral and written communication.

To develop and capitalize on sharpened use of the senses for improved expression.

Consultant: Edward Teichert, SPEEDIER Staff

The five-day session was used by all teachers in York, Ephrata, Hempfield, Annville-Cleona, Conestoga Valley, and Cocalico. Eastern Lancaster and Cornwall-Lebanon used three day sessions. The three-day plan was elected to decrease costs for paying teachers, and to use more effectively in-service days established by these districts. Such districts completed the five session format by the first week in November.

The evaluations of these workshops indicate that they were successful. Some problems did occur with districts only using three sessions, however, because they did not receive the training in its proper sequence. Also, some vital sessions were not received until the program had been in effect for four to eight weeks.

In-Service Training

Additional training sessions were developed for in-service workshops during the year. To aid teachers in developing meaningful lessons and units, and to promote an understanding of the necessity of developing short-term and long-range goals, a behavioral objectives workshop was developed.

Objectives:

To be aware of the goal to be achieved through daily planned classroom activities.

To understand the need for student objectives rather than teacher objectives.

To be able to write a behavioral objective.

To determine whether or not an objective has been achieved.

Consultants: George Baer, Susan Beede, Edward Teichert, SPEEDIER Staff

An additional in-service session is in the process of development to satisfy needs expressed by participating teachers. A half-day session will concentrate on the improvement of classroom questioning techniques. The other half of the day will include grade level meetings for interchange of ideas and the development of supplementary materials.

An additional in-service session or sessions is in the planning stage for developing techniques for adapting the Nebraska curriculum to the unique student needs of each district.

Great flexibility by task force members is necessitated by the variety of district yearly in-service plans, or by their attitude toward when and how such sessions should occur. For example, some districts have scheduled sufficient days for such training and large group sessions can be conducted. Other districts have after-school sessions; others schedule Saturday sessions. Groups participating in such sessions may

vary in size from four to fifty. Time segments available per session range from one and one half hours to a full six-hour day. Many times it is necessary to conduct workshops for two districts on the same day. As a result, task force members have learned to expand their knowledge of behavioral objectives, micro-teaching techniques, creative activities, and other aspects of the total operation in order to meet varying needs and schedules of each district.

Role of Building Principal

During December all building principals met at the SPEEDIER office to discuss the role of the building principal in implementing the Nebraska program. Valuable information was revealed which will help the task force conduct more meaningful in-service programs for teachers and administrators, establish better observation techniques, and improve the micro-teaching approach. Following are some suggestions made by the twelve administrators attending.

Time spent by task force members in school could be used more effectively. More specific suggestions should be given by the observer during the follow-up discussion. The task force members could organize and participate in grade-level meetings. Principals should arrange for a more flexible arrangement for observation and discussion. Inter-district grade-level meetings would be helpful for participating teachers and administrators.

Modifications should be made in the micro-teaching sessions:

Teachers should be made aware that micro-teaching is experimental rather than a performance.

All teachers may not benefit from the re-teach segment.

Specific new skills to be tried should be suggested for teacher use.

The teachers use students other than their own.

Objective assessment tools would increase the value of micro-sessions.

Nebraska materials need to be modified and amplified for greater success of the program. Teacher manual indices should be provided. Sequential language development guidelines should be identified. Alternate editions of literature selections should be identified. Teacher resource information for language study should be identified to accommodate transition from traditional to linguistics approach.

Modifications of teacher in-service training should be made. A sequence of sessions should be made to insure understanding from general to specific use of materials and techniques. Teachers' understanding of the entire K-12 sequence should be emphasized. Exposure to practical experiences of other teachers should be increased. Workshop topics should be integrated.

Inputs for the principal should be examined carefully and include the following: a list of suggestions concerning organization materials, teacher contacts which have previously contributed to the success of the program, a list of materials information for budgetary purposes, and training sessions to provide administrators with an overall understanding of the program.

Finally, the principals emphasized the need for continuing reenforcement on the total change process which occurs when an innovate program is implemented.

Observations

Task force members will spend ten days in each participating school consulting with teachers, resolving materials problems, observing classes, and conducting micro-teaching sessions.

A first visit is made during the first two weeks. The purpose of this visit is to meet each teacher individually, check on materials, set up a time for a classroom observation, and establish a format for such visits with the building principal.

During a classroom observation the task force member is looking for teacher strengths and weaknesses, symptoms of fright or frustration with the new venture, and possible areas of concentration on following micro-teaching sessions. Each observation is followed by a

discussion with the classroom teacher to resolve evident problems and to discover strengths and weaknesses of the program as the teacher perceives them. Such observations occur throughout the year. During the discussions, task force members gather valuable information to be used in structuring future in-service programs, improving observation techniques, and identifying resource materials needed by the students and teachers.

Future Plans

Activities for the schools now participating will continue as previously described. Every effort will be made to achieve and sustain excellence in the present program. Observations will continue, and efforts will be made to improve observation techniques. Microteaching approaches will be evaluated and modified for improvement. If the project is to expire, diligent efforts will be made to develop techniques for continuing curricular development, using the Nebraska Curriculum as a foundation. Information for ordering materials will be given to schools. Every effort will be made to insure continuation and further development of the program.

If the project is to continue, concentration of energies will shift without affecting the participating districts. An index will be compiled for three elementary manuals to facilitate the use of the poetry and language exploration manual. Tests of all materials, costs, publishers, and ordering information will be compiled for districts to use when they develop budgets. Districts which have already agreed to participate next year will be contacted to determine the extent of participation, and plans will be made for implementation.

Although not final at the time of this report, it is possible that the task force will begin to train 300 teachers plus administrators for implementation of the Nebraska Program in early 1970. Tentative plans call for training fourteen administrators as the first step in a phased implementation in fourteen elementary schools.

All task force members will continue to develop expertise in all phases of the Nebraska program. The task force will continue to meet with elementary groups and secondary groups to explain the role the Nebraska Program can play in continuing curricular development.

Micro-Teaching

The micro-teaching program is described in detail elsewhere in this report.

General Observations

The in-service programs are essential for effecting teacher change. Initially teachers are absorbed in the complexities of a new program which demands new teaching strategies, and the use of new materials. Workshop programs are geared to reinforce the idea that the use of the Nebraska Curriculum is only a step toward the development of a language arts program which is appropriate for a specific school district or school within a district.

A serious problem exists in "cracking the secondary fortress". In spite of varied efforts, we have not been successful in implementing innovative programs on the secondary level. Teachers in the elementary school by comparison are very receptive to innovations. Apparently secondary teachers are far more attached to whatever it is they are now teaching than are the more adaptable elementary teachers. The elementary's are accustomed to a variety of classroom techniques and objectives. Continued efforts will be made to resolve this problem.

On the elementary level there is no doubt that the literature phase of the Nebraska Curriculum is successful. Composition activities are acceptable. Linguistics poses the major problem. Future training programs must devote more attention to closing the gap which exists between "old" and "new" language teaching methods.

Section E

Micro-Teaching and Interaction Analysis

MICRO-TEACHING AND INTERACTION ANALYSIS

Introduction

Micro-teaching was developed at the Stanford University Graduate School of Education for use with their Master of Arts in Teaching (MAT) candidates. The program was designed to help those intern teachers develop selected teaching skills.

The procedure includes the planning of a short lesson usually 5 to 10 minutes long. The lesson is then taught to a small group of students (5 to 7) and video-taped. Following the taping session, the intern teacher and supervisor view the lesson. A critique follows with suggestions for planned changes in the procedure. A new group of students are then presented the modified lesson while it is being taped. A second viewing and critique follow to determine if the desired modifications have been made. This procedure could be repeated a number of times to enhance the development of a desired skill. The basic purpose is to modify teacher behavior in planned directions.

It was evident to SPEEDIER that this technique could be a valuable tool when used with in-service teachers working with new curricular programs. New problems were anticipated when working with experienced teachers.

Mini-Course I developed by the Far West Regional Laboratories in Berkeley, California, used the micro-teaching concept with in-service teachers. It was found that teachers using Mini-Course I liked the idea of using video-tape equipment to see themselves but felt they needed a definitive tool with which to describe their teaching. The marriage of micro-teaching and a form of interaction analysis has successfully been used at both Temple University in Philadelphia, Pennsylvania and the University of California at Davis. This combination gives an excellent descriptive feedback system to help teachers analyze their classroom interaction patterns.

Experimental Phase of Micro-Teaching

An introductory experiment of micro-teaching was developed as an integral part of SPEEDIER's Spring 1969 piloting of the Nebraska Language Arts Curriculum. Since the Nebraska approach differed from the traditional language arts strategies it was decided to use the video-tape equipment in an effort to develop an awareness in the teacher of his interaction patterns. The thesis is that before one can modify his behavior in a determin d direction, he must be aware of his present interaction with the students. Once this awareness is obtained, then desired modifications can be suggested.

During the initial introductory workshops, pilot teachers were presented with an introduction to the difference between "evaluating" and "describing" teaching. The fourteen category modifications of the Flanders System of Interaction Analysis developed by SPEEDIER was introduced to the teachers at that time as an instrument that could be used to describe teaching. An explanation of micro-teaching and the rationale behind its development was also included in this discussion.

Based on administrator interest, the Franklin Elementary School in York, Pennsylvania was chosen to introduce micro-teaching. It became the job of the SPEEDIER staff to motivate the teachers to participate. After two afternoon meetings the six teachers agreed to cooperate in the micro-teaching venture. The second phase of involvement required cooperation of the school principal.

The local schools' involvement included all the logistical problems involving releasing teachers to micro-teach, coordinating use of students and securing a room for the video-taping. SPEEDIER furnished the consultant personnel and necessary equipment and materials to complete the operation.

The first two micro-teaching sessions were aimed at examining awareness of questioning techniques. Several days before the lessons were taught, the teachers were given the following information:

Objectives for the Franklin Elementary School
Micro-Teaching Experiment

I To make the teachers more aware of their behavior so they can accurately describe their teacher-pupil interaction.

Specific Objectives:

A. Prepare self-perception inventory of lesson completed.

B. Assess lesson presented.

c. Compare A and B for congruency.

D. Plan for necessary changes.

II To enable teachers to accurately plan and control their questioning techniques.

Specific Objectives:

A. Plan questions before lesson is presented.

B. Assess student responses to questions.

C. Determine whether questions planned were used appropriately.

D. Determine what preplanned questions evolved.

III To help teachers change their verbal interaction patterns to be more non-directive and open in questioning techniques.

Specific Objectives:

A. Assess teach and re-teach tapes to determine changed behavior.

B. Assess changes to determine if they were the desired outcomes.

The following is the suggested sequence for the micro-teaching experience:

1. Plan micro-lesson in detail with easily observed objectives and material written out, if necessary.
2. Teach lesson.
3. Estimate interaction pattern by use of self-perception inventory.
4. View or listen to lesson.
5. Compare lesson objectives with observed outcomes.
6. Compare perceived interaction with observed interaction.
7. Assess comparisons in #5 and #6.
8. Determine desired modifications.
9. Fill in Self-Evaluation Form.
10. Re-teach lesson.
11. Repeat steps 3 through 9.
12. Recycle again if needed.

Before the sessions it was decided that the use of the self-perception inventory would be too time-consuming. Therefore, item 3 was eliminated. The comparison described in step 6 involved the teachers' and observers' oral comments. Often number 9 was not completed until after both the teach and reteach. This form follows:

Teacher Self-Evaluation Form

Practice Micro-Teach, Teach_____
Reteach_____ (Please Check)
Date_____

Name_____

Purpose: To help you assess your over-all performance.

1. You will be asked to give general impressions of your lesson. How well did you carry out the specific behavior(s) you were attempting?

   (a) Did you use the questions that you planned?

   _____ 1. Could have done better
   _____ 2. About what I expected
   _____ 3. Better than anticipated

   (b) Did the students respond to the questions asked?

   _____ 1. Could have done better
   _____ 2. About what I expected
   _____ 3. Better than anticipated

   (c) Did you feel the situation was artificial?

   _____ 1. Highly
   _____ 2. Partially
   _____ 3. Not at all

In what area do I need to improve? _____

_____

_____

Your comments, suggestions, and impressions. _____

_____

_____

This was a modification of a sheet used by Mini-Course I. Twenty-five of these sheets were completed by the group of teachers at Franklin Elementary School. The following quantitative analysis was made:

1a. A mean value of 1.75 was obtained for this question showing the teachers did not do quite as well as they had anticipated in using planned questions.

1b. A mean value of 2.10 was obtained for this question showing the students responded about as expected.

1c. A mean value of 2.5 was obtained for this question showing that the teachers felt the micro-sessions were only slightly artificial.

Most of the written comments could be placed in two categories: they were either comments about what the teacher saw herself doing, or questions about the procedure she used. All comments were of a positive nature. The over-all response was so positive that a meeting was held so that the teachers could view each other's tapes and discuss common problems. Based on this interest some of the teachers were asked to sign the following release so SPEEDIER could use their taped lessons for training purposes.

PERSONAL RELEASE OF VIDEO AND/OR AUDIO TAPES

SPEEDIER Project has my release to use the video and/or audio tape of my teaching for any educational purpose they may desire.

_____
Name

_____
Date

Five were asked for permission and all five granted the request.

Expanded Use of Micro-Teaching and Interaction Analysis

Following the successful completion of the micro-teaching experiment during the spring, it was decided to include the technique as part of the Expanded Nebraska Language Arts Pilot Program. Experience suggested that a full day of training in micro-teaching and interaction analysis be included as a part of the Nebraska Pilot In-Service Training.

The full day of in-service training centered around an introduction to interaction analysis as a tool to be used to help the teacher describe for himself his interaction patterns. Listed below are the forms used for the workshops, along with a brief description of how they are used.

A. This sheet has listed the 14 category modifications of the Flanders System of Interaction Analysis used by SPEEDIER. The pilot teachers were asked to review these categories and view them only as a descriptive device to analyze teaching.

B. These pages are designed so a teacher could describe quantatively what he had done at the completion of a lesson. This perception can then be compared with an accurately coded description of the same lesson. The idea is to have as much similarity between perception and observed behavior as possible.

C.&D. The matrix problems are presented to give the teachers an idea of how to code a lesson and prepare a pictorial sketch matrix that can be used to describe the interaction. After building the two matrices, solutions are handed out so necessary connection can be made and problem areas detected. Sheet D is used to construct the matrix.

E. Matrix areas are used to describe some teaching patterns. This sheet introduces to the teachers certain areas that can be examined in order to describe the patterns utilized in the class.

F.&G. After working with the areas sheets F. and G. are analyzed and described in terms of the areas. The teachers are asked to compare and contrast the two classrooms described on those completed matrices.

H. Small groups are formed for the purpose of listening to audio-taped classroom presentations. Sheet H. is provided so teachers can, if they desire, practice coding. The purpose is not to make trained coders, but to have them discuss the interaction among themselves.

With an awareness of interaction analysis in mind, the teachers are then presented with the concept of micro-teaching. Extensive use of video-tape equipment at this point permits introduction to this equipment. Taped micro-teaching sessions are viewed and analyzed by the teachers. Many questions arise and are discussed. Most teachers leave the workshop with an understanding of the techniques and a willingness to participate in micro-teaching.

I TEACHER TALK

A. Indirect Influence

1. ACCEPTS FEELING: accepts and clarifies the feeling tone of the students in a non-threatening manner. Feelings may be positive or negative. Predicting and recalling feelings are included.

2. PRAISES OR ENCOURAGES: praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding the head or saying "uhhuh?" or "go on" are included.

3. ACCEPTS OR USES IDEAS OF STUDENT: clarifying, building, or developing ideas or suggestions by a student. As teacher brings more of his own ideas into play, shift to category five.

4. ASKS QUESTIONS: asking a question about content or procedure with the intent that a student answer.

a) Asks Narrow Question: asks drill questions, questions requiring one or two word replies or yes-or-no answers; questions to which the specific nature of the response can be predicted.

b) Asks Broad Question: asks relatively open-ended questions which call for unpredictable response; questions which are thought-provoking. Apt to elicit a longer response than 4a.

B. Direct Influence

5. LECTURES: giving facts or opinions about content or procedure; expressing his own idea; asking rhetorical questions.

6. GIVES DIRECTIONS: directions, commands, or orders with which a student is expected to comply.

7. CRITICIZES OR JUSTIFIES AUTHORITY: statements intended to change student behavior from non-acceptable to acceptable pattern; reprimanding someone; stating why the teacher is doing what he is doing, extreme self-reference.

II STUDENT TALK

8. Responds to the teacher

   a) Predictable: relatively short replies, usually, which follow category 4a. May also follow category 6 e.g., "David, you may read next."

   b) Unpredictable: replies which usually follow category 4b, opinion, interpretation, evaluation.

9. Responds to another pupil - student-student interaction.

10. Student questions - includes comments which ask for information, procedure opinions of the teacher or another student.

III OTHER

11. Silence: pauses or short periods of silence during a time of classroom conversation.

12. Confusion: considerable noise which disrupts planned activities. This category may accompany other categories or may totally preclude the use of other categories.

INSTRUCTION SHEET FOR FILLING OUT SELF-PERCEPTION INVENTORY

A. Question number one asks you to estimate the amount of time you talk in the classroom while there is verbal interaction going on between you and your students. This would include teacher lecturing to the class, teacher leading review discussion, question and answer, and any other type of verbal interaction where it is possible for the teacher to become involved.

B. Question number two asks you to estimate the amount of time that your pupils talk during a normal class period. This can include pupil answering questions asked by teachers, pupils conferring with one another, and pupil asking teacher questions. Do not include here time spent by pupils in individual-reports to the class.

C. The sum of the percentage figures in questions one and two should add up to almost 100 percent. It should be understood that some part of the class period could be involved in silence--while you are waiting for a student to respond or trying to let an idea or opinion be absorbed.

D. Questions number three through six refer to specific types of student talk. In estimating percentages for three through six please bear in mind that the sum, the total that is, of the percentages in three through six should equal to the percentage figure marked in question number two.

E. Questions number seven through fourteen are specific types of teacher talk, all of which would be included under question number one. Therefore, the sum of questions number seven through fourteen should add up to the total that you have placed for question number one.

F. To help check the consistency of your responses, the following table is presented. Please fill in your responses to the 14 questions on the appropriate blanks. To check your consistency, the total of teacher talk (7-14) should be the same as Q#1. The total student talk (3-6) should be the same as Q#2. The percentage for Q#1 added to the percentage for Q#2 should equal almost 100%.

Teacher Talk		Student Talk	
Q#7	_____		
Q#8	+ _____		
Q#9	+ _____		
Q#10	+ _____		
Q#11	+ _____	Q#3	_____
Q#12	+ _____	Q#4	+ _____
Q#13	+ _____	Q#5	+ _____
Q#14	+ _____	Q#6	+ _____
Total	_____ same	Total	_____ same
Q#1	_____ +	Q#2	_____ = ____almost 100%

SELF-PERCEPTION INVENTORY

Please think of an average class lesson when you mark this inventory. The numbers on the scale represent the percentage of the class period which is devoted to each item listed. Please think about these items carefully before you check them on the scale. If you can estimate the percentage very accurately, please put the exact number on the scale; otherwise use the closest five percent interval. Your answers will be confidential and will not be used to evaluate you. Neither the school administration nor your department chairman will see this form. Thank you for your cooperation.

1. Of a typical class period, how much time do you spend talking to the students in some form of activity or another?

0 10 20 30 40 50 60 70 80 90 100

2. How much of a typical class period do your students talk in response to you, or class members?

0 10 20 30 40 50 60 70 80 90 100

3. What part of a typical period do your students respond to you with relatively short, predictable replies?

0 10 20 30 40 50 60 70 80 90 100

4. What part of a typical class period do your students respond to you with statements that involve their opinion, interpretation, or evaluation of materials?

0 10 20 30 40 50 60 70 80 90 100

5. Of a typical class period how much time do your students spend responding to each others comments?

0 10 20 30 40 50 60 70 80 90 100

6. Of a typical class period how much time do your students spend in asking questions of either the teacher or other students?

0 10 20 30 40 50 60 70 80 90 100

7. How much of your class period do you spend in accepting or clarifying the feelings of your students? This could be either personal feelings or feelings related to academic matters.

0 10 20 30 40 50 60 70 80 90 100

8. How much of the class period do you praise or encourage your students' action and behavior?

0 10 20 30 40 50 60 70 80 90 100

9. During a typical class period how much of the time do you either accept or use student ideas in building the lesson?

0 10 20 30 40 50 60 70 80 90 100

10. What part of a typical class period do you spend in asking questions that require yes or no replies or simple one or two word answers? Questions where you are looking for a specific predicted answer?

0 10 20 30 40 50 60 70 80 90 100

11. What part of a typical class period do you spend in asking questions that are open-ended and thought provoking? Questions involving opinion, evaluation, or interpretation on the part of the student?

0 10 20 30 40 50 60 70 80 90 100

12. What part of a class period do you usually spend in lecturing or giving facts and opinions to your students?

0 10 20 30 40 50 60 70 80 90 100

13. Of a typical period how much time do you spend giving directions to your students?

0 10 20 30 40 50 60 70 80 90 100

14. Of a typical class period what part do you spend in criticizing your students or justifying your authority?

0 10 20 30 40 50 60 70 80 90 100

C

MATRIX PROBLEMS

Problem #1				Problem #2			
5	9	11	4a	5	11	11	11
5	9	11	4a	5	11	5	11
5	9	8b	11	5	12	5	5
4a	9	8b	8a	5	12	5	5
4a	9	8b	8a	5	8a	5	5
10	9	8b	11	5	8a	5	5
8a	11	8b	2	4a	2	5	5
8a	11	11	2	4a	3	5	4a
2	10	11	4b	11	5	5	4a
3	10	9	4b	8a	5	4a	11
3	10	9	4b	8a	5	4a	8a
4b	2	9	4b	5	5	4a	8a
4b	2	9	11	5	5	5	2
4b	5	9	11	5	6	5	3
11	5	10	11	6	11	5	3
11	5	10	11	6	11	6	5
8b	4b	10	8b	6	11	6	5
8b	4b	3	8b	6	6	5	5
8b	4b	3	8b	7	6	5	5
8b	4b	3	8b	7	5	7	5
8b	5	3	8b	7	5	7	5
8b	5	3	1	6	4b	7	5
11	4b	5	1	6	11	7	5
11	4b	5	1	4a	8a	11	5
9	4b	5	1	4a	8a	11	5
			5				5

14 x 14 MATRIX

	1	2	3	4a	4b	5	6	7	8a	8b	9	10	11	12	T
1															
2															
3															
4a															
4b															
5															
6															
7															
8a															
8b															
9															
10															
11															
12															
T															
%															

____% Teacher Talk $\frac{1\text{-}7}{\text{Total}}$

____% Student Talk $\frac{8a\text{-}10}{\text{Total}}$

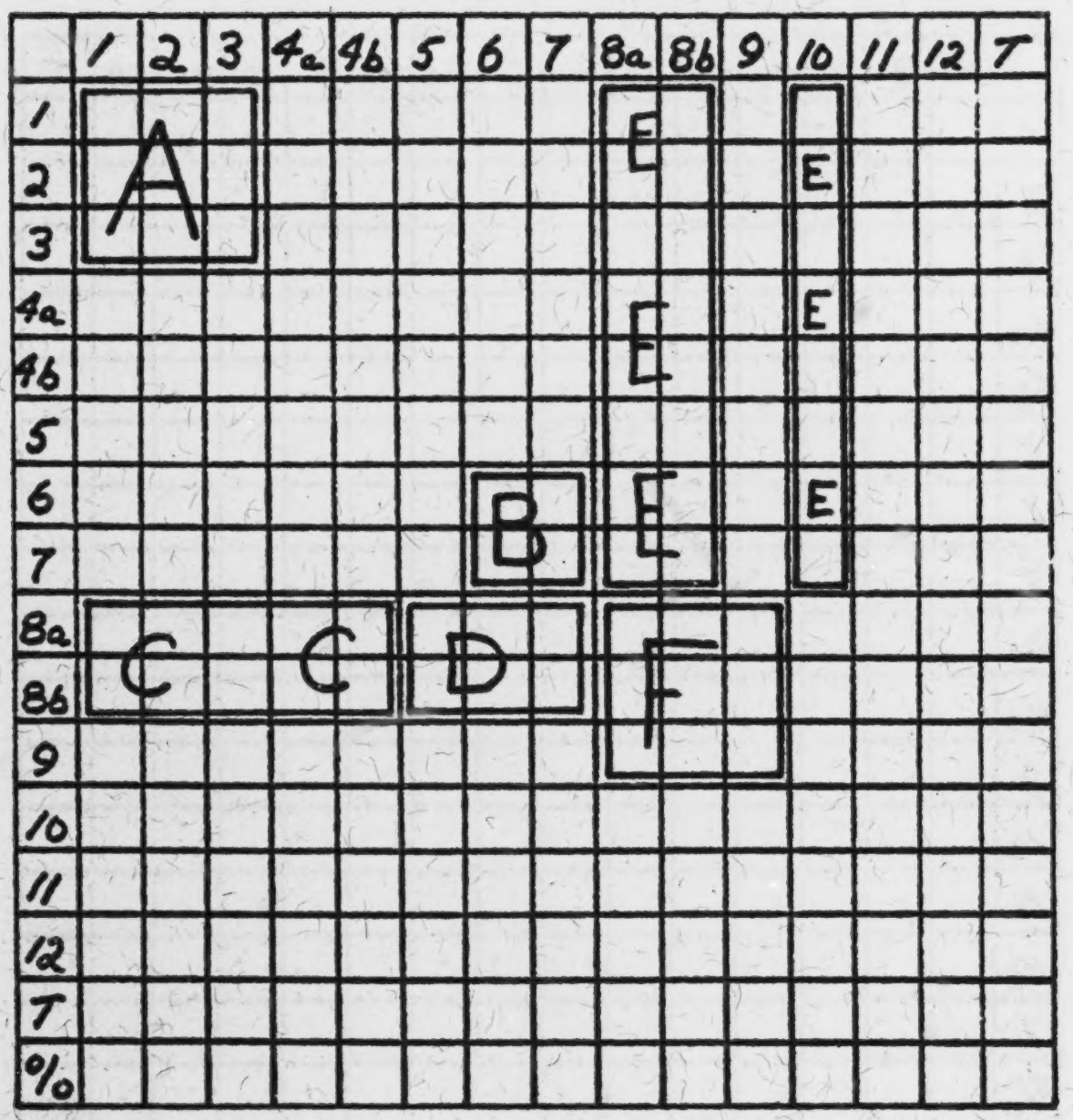
____% Teacher Indirect Influence $\frac{1\text{-}4b}{\text{Total}}$

____% Teacher Direct Influence $\frac{5\text{-}7}{\text{Total}}$

____ Teacher I/D Ratio $\frac{1\text{-}4b}{5\text{-}7}$

____ T/P Ratio $\frac{1\text{-}7}{8a\text{-}10}$

14 x 14 INTERACTION MATRIX



CATEGORIES

Teacher Talk 1-7

Student Talk 8a-10

Silence 11, 12

AREAS

A - Extended Teacher Indirect Influence
B - Extended Teacher Direct Influence
C - Indirect Teacher Response to Students
D - Direct Teacher Response to Students
E - Type of Student Response to Teacher
F - Prolonged Student Talk or Student-Student Interaction

COMPLETED MATRIX NUMBER 1

	1	2	3	4a	4b	5	6	7	8a	8b	9	10	11	12	T
1															
2						15									15
3						20									20
4a				35		40			40				5		120
4b				2		2				4			3		11
5				30	2	200	36	10				3			281
6				43			5								48
7							7	20					8		35
8a		10	20											30	60
8b		2									2				4
9		3									10				13
10					9										9
11				10				5				1			16
12						4			20		1	5		35	65
T		15	20	120	11	281	48	35	60	4	13	9	16	65	697
%		2.2	2.9	17.2	1.6	40.3	6.9	5.0	8.6	.6	1.9	1.3	2.3	9.3	

76.0 % Teacher Talk $\frac{\text{1-7}}{\text{Total}}$ $\frac{550}{697}$

12.3 % Student Talk $\frac{\text{8a-10}}{\text{Total}}$ $\frac{86}{697}$

23.8 % Teacher Indirect Influence $\frac{\text{1-4b}}{\text{Total}}$ $\frac{166}{697}$

52.2 % Teacher Direct Influence $\frac{\text{5-7}}{\text{Total}}$ $\frac{364}{697}$

.46% Teacher I/D Ratio $\frac{\text{1-4b}}{\text{5-7}}$ $\frac{166}{364}$

6.4 % T/P Ratio $\frac{\text{1-7}}{\text{8a-10}}$ $\frac{550}{86}$

COMPLETED MATRIX NUMBER 2

	1	2	3	4a	4b	5	6	7	8a	8b	9	10	11	12	T
1	30											10			40
2		10			10	15						5			40
3			40			5					8	10		2	65
4a				5					10						15
4b					30					30					60
5				10	10	50									70
6															
7															
8a			10						10						20
8b		30	15							100					145
9	10										100				110
10					10					15	2				27
11												2			2
12													2	4	6
T	40	40	65	15	60	70			20	145	110	27	2	6	600
%	6.7	6.7	10.8	2.5	10.0	11.7			3.3	24.2	18.3	4.5	.3	1.0	

48.3 % Teacher Talk $\frac{\text{1-7}}{\text{Total}}$ $\frac{290}{600}$

50.3 % Student Talk $\frac{\text{8a-10}}{\text{Total}}$ $\frac{302}{600}$

36.7 % Teacher Indirect Influence $\frac{\text{1-46}}{\text{Total}}$ $\frac{220}{600}$

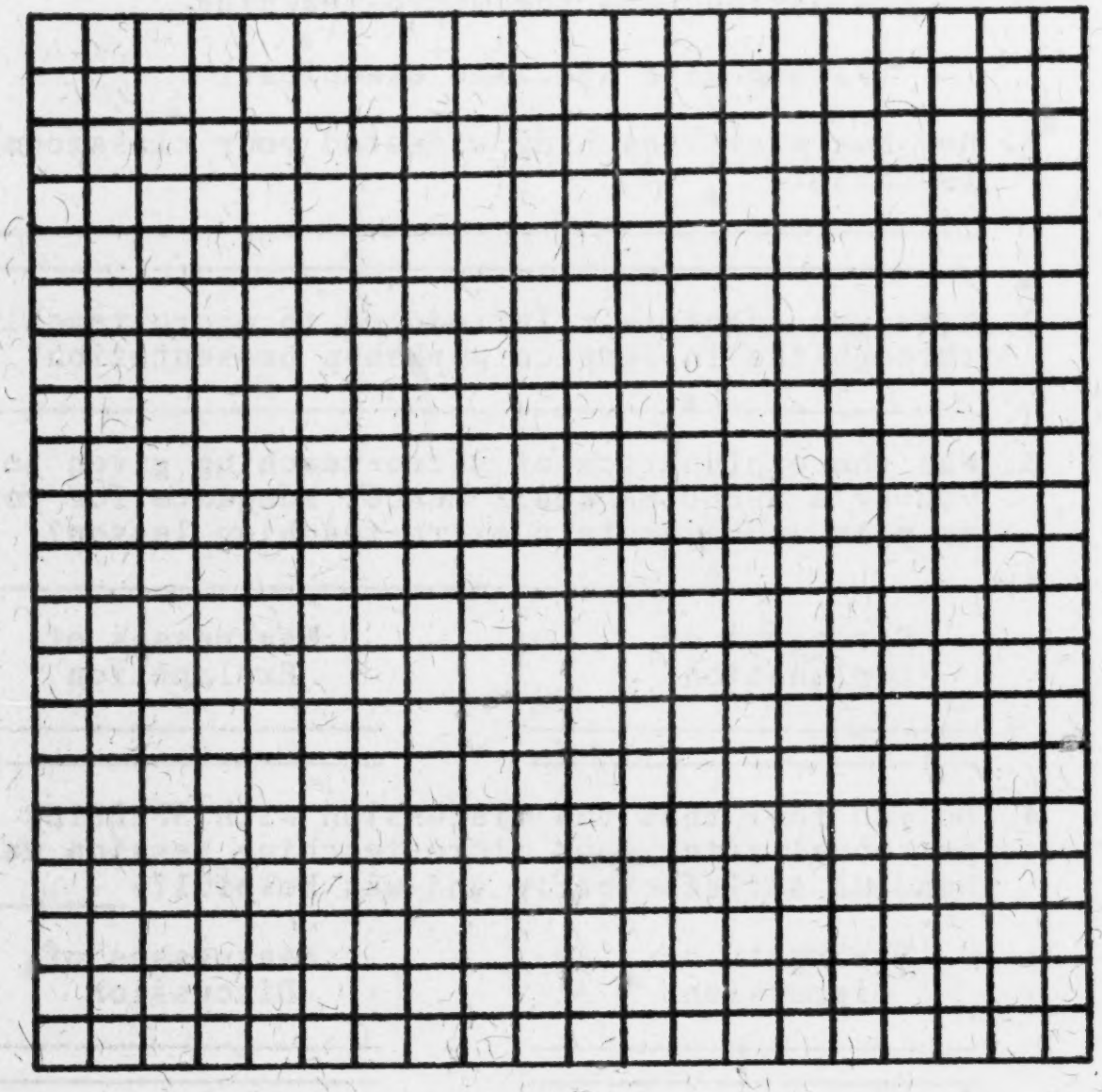
11.7 % Teacher Direct Influence $\frac{\text{5-7}}{\text{Total}}$ $\frac{70}{600}$

3.1 Teacher I/D Ratio $\frac{\text{1-46}}{\text{5-7}}$ $\frac{220}{70}$

.96 T/P Ratio $\frac{\text{1-7}}{\text{8a-10}}$ $\frac{290}{302}$

Teacher's Name_____

Pre _____ Post _____ Program _____ Level _____



1 ____	5 ____	8a ____	11 ____
2 ____	6 ____	8b ____	12 ____
3 ____	7 ____	9 ____	
4a____		10 ____	
4b____			
Total ____	Total ____	Total ____	Total ____T____

The first sessions of micro-teaching were scheduled early in the school year. After about half of the Nebraska Pilot Teachers had completed the micro-teaching a questionnaire was sent to them.

Evaluation Form for Micro-Teaching

(Please cite specific examples.)

1. How has micro-teaching effected your classroom teaching?

_____

_____

2. Were you adequately introduced to micro-teaching through the in-service workshop presentation?

_____

3. Was the explanation of micro-teaching given to you by a SPEEDIER staff member adequate for you to plan and execute a micro-teaching lesson?

_____

Strengths of Explanation	Weaknesses of Explanation
_____	_____
_____	_____

4. Do you feel that the discussion with SPEEDIER personnel after your micro-teaching session was handled satisfactorily and was helpful? _____

Strenghts of Discussion	Weaknesses of Discussion
_____	_____
_____	_____

Based on the responses the following can be stated:

1. Most teachers have become more aware of what they were doing in the classroom.

2. All teachers responded that they were adequately introduced to micro-teaching through the in-service workshop.

3. The teachers felt that the Nebraska Team adequately helped them plan and execute their micro-lesson. Comments referred positive effect of suggestion by staff members.

4. Most of the teachers felt that the discussion after the micro-session was handled satisfactorily by the team. Several comments suggested that the discussions could have been more directive.

Apropos of the last comment, several of the SPEEDIER consultants taped their critiques with the teachers. Those were then viewed by all the Nebraska Team members together. Following an in-depth discussion, it was decided that the basic concept of awareness was partially missing from the discussions and some direction was needed. Two forms were developed for this purpose, the first titled "Micro-Teaching Inventory" would be used by the teacher. Before the teaching session the participant would fill out item one with his specific objective. At the same time he would check Column A for those interaction categories that he planned to use in achieving the objective. Immediately after teaching the micro-lesson, but before reviewing it, the teacher would check Column B for those categories of interaction that he perceived using. Finally the teacher would check to what degree he felt he achieved the stated objective.

The second form - "Critique Assessment Sheet" was designed for the SPEEDIER consultant to use. After viewing the tape, Column A would be checked for those categories the observer felt were used along with an assessment of objective achievement.

The discussion following the micro-session could now center on a number of items. Comparisons could be made between the teachers before and after interaction assessments; between observers assessment and teachers assessment of interaction patterns; and between the assessments of objective achievement. Besides those points, others could be brought in at the descretion of the Nebraska Team members. Suggestions would be emphasizing an awareness of the interaction patterns. The reteach procedure would be similar with the teacher filling out the same form only modifying the plan and perceptions according to experience. The final critique would parallel the original discussion.

Micro-Teaching Inventory

Name_____ School_____

Please check -- Teach____ Reteach____

1. Please state your objective for the micro lesson. Use behavioral terms if possible. _____

_____

2. Please check the categories of interaction you plan to use in Column A. Do this prior to teaching the lesson. Immediately after teaching the lesson please check those items that you <u>think</u> you used.

	A (Before)	B (After)
Teacher Talk		
1. Accepts students feelings	____	____
2. Praises or encourages	____	____
3. Accepts or uses ideas of student	____	____
4a. Asks narrow question	____	____
4b. Asks broad question	____	____
5. Lectures	____	____
6. Gives directions	____	____
7. Criticized or justifies authority	____	____
Student Talk		
8a. Predictable student response	____	____
8b. Unpredictable student response	____	____
9. Student-Student interaction	____	____
10. Student questions	____	____
Other		
11. Silence	____	____
12. Confusion	____	____

3. Please assess the degree to which you achieved the objective stated in number one.

Completely____Mostly____Partially____Not at all_____

Critique Assessment Sheet

Initials of Observer _____

1. The interaction viewed during the micro-lesson will be described by the outside observer on the following checklist.

Teacher Talk	A (Teach)	B (Reteach)
1. Accepts students feelings	___	___
2. Praises or encourages	___	___
3. Accepts or uses ideas of student	___	___
4a. Asks narrow question	___	___
4b. Asks broad question	___	___
5. Lectures	___	___
6. Gives directions	___	___
7. Criticizes or justifies authority	___	___
Student Talk		
8a. Predictable student response	___	___
8b. Unpredictable student response	___	___
9. Student-Student interaction	___	___
10. Student questions	___	___
Other		
11. Silence	___	___
12. Confusion	___	___

2. To what extent did the teacher achieve the instructional objective planned?

Completely____Mostly____Partially____Not at all_____

The new forms and procedure has been used by each of the four team members with highly positive results. Both the teachers and specialists feel that a more positive sense of awareness results. The two forms used are still in the experimental stages of development. It is felt that an adjustment must be made to allow for quantitative as well as qualitative assessment of interaction patterns.

Future Outlook of Micro-Teaching

It is felt that since the overall acceptance of micro-teaching has been highly positive, it should be incorporated in the other pilot programs. The base used can either be used for improving awareness or can be joined with new strategy practice for technique-oriented programs. The micro- concept also has application to content areas other than language arts and social studies.

Experience with the SPEEDIER fourteen category system suggests further modifications to be used with emphasis in the language arts. Still other modifications could be made on social studies and all other desired areas. This system coupled with micro-teaching has vast implications for the potential of increasing awareness of the classroom teacher.

Section F

Behavioral Objectives

BEHAVIORAL OBJECTIVES

In-Service Programs

The fourteen in-service programs dealing with behavioral objectives ranged from a half-day session involving approximately 150 teachers to several days with as few as seven teachers. The objectives for the sessions varied from solely a creation of awareness and interest in behavioral objectives to the writing of objectives for specific courses of study.

With few exceptions this was the first time any of the teachers had been exposed to the rationale for the use of behavioral objectives. In fact, there was much confusion as to what the term "behavioral" meant when tied to the noun "objective".

The first workshop was held June 16-19 at the Northside Elementary School in Palmyra. Seven teachers were present representing elementary and secondary levels of instruction in social studies.

As an introduction to the workshop, a brief description of the background behavioral objectives development and the rationale for their use was presented.

Following the introduction, a packet developed by the SPEEDIER office on writing behavioral objectives was used. Selected filmstrips and audio-tapes from the Vimcet collection developed by Dr. Papham, U.C.L.A., were used throughout the workshop.

By using the above mentioned materials, the participants were able to define a behavioral objective, to correctly select objectives written in behavioral terms, and to write objectives using the three criteria indicated (conditions, performance, and extent).

After developing the necessary skills in defining, selecting, and writing behavioral objectives, the participants then did the following:

1. Rewrote general objectives in behavioral terms.

2. Wrote lesson plans for each behavioral objective including:
   a. General objective
   b. Behavioral objective
   c. Student preassessment
   d. Learning activities
   e. Final evaluation

3. Identified level of thinking (cognitive domain) for each objective developed.

4. Wrote objectives to include at least four levels of thinking.

5. Listed at least three of the five categories in the affective domain.

The following is quoted from the "Interpretation of Evaluation Sheets" prepared by Dr. Kendrick McCall, Behavioral Scientist, for the workshop:

> "The conference was rated quite positively by the participants. The part that apparently was the most beneficial to them was the use of the filmstrips relating the development of instructional objectives. There was no negative comment appearing on the evaluation sheets. It would appear from the comments that Mr. Baer did an excellent job in outlining and preparing this workshop. This workshop can be considered excellent."

Four separate groups of teachers, as part of the initial five day workshops for the Taba Social Studies Program, had two in-service days devoted to behavioral objectives (for specific dates see the chronological summary following).

The four groups were as follows:

Miscellaneous groups	
a. Annville-Cleona District	8 teachers
b. Ephrata	6 teachers
c. Lampeter-Strasburg	4 teachers
d. Eastern York	2 teachers
e. Spring Grove	1 teacher
f. Milton Hershey	1 teacher

Hempfield	18 teachers
Penn Manor	12 teachers 2 administrators
Wilkes-Barre	17 teachers 2 administrators

The primary objectives for the workshops were to have the teachers be able to define a behavioral objective; to identify objectives written in behavioral terms; to write behavioral objectives using the Taba Teacher's Guide as a source; and to identify the thought levels of objectives as they had written.

On September 22 a workshop was held at Messiah College for fifteen student teachers. The session was devoted to their defining, identifying, and writing behavioral objectives. They identified and listed the elements which are recommended for inclusion in teaching units and lesson plans.

A comment by one of the student teachers summed up the reaction of the total group: "I feel I can now plan teaching -- learning experiences according to what I want the pupils to become and not just according to what I can do to fill my time. Learning to write objectives helps me feel more confident about teaching. It gives me some means of achieving security and stability."

At the request of the Palmyra Area Schools a half-day session was conducted for the total teaching staff with approximately 125 teachers attending.

This was the initial session of a two-day workshop planned by the district. The purpose of the first session was to make the total staff aware of behavioral objectives, including the background and rationale, and to create an interest in the development of behavioral objectives.

The presentation included the use of two Vimcet filmstrips and audio-tapes on curriculum rationale and writing educational objectives as well as an explanation of why behavioral objectives have come into such widespread use.

The second session was a question and answer period. For this session small groups met to raise questions which were presented when the total group reconvened.

An analysis of the teachers' comments showed that the majority felt that the Vimcet filmstrips were very valuable, as was the opportunity to discuss and have a question and answer period.

On October 27 a session similar to the one held at Palmyra Area Schools was held at the School District of Hanover Borough in York County. The one exception to the morning session was substitution of the film "No Reason to Stay" for the filmstrip "Curriculum Rationale". The purpose of the film was to get the teachers to begin to question what the schools are presently doing.

The afternoon session was conducted by Dr. McCall. His presentation included the use of video-tape for self-analysis, viewing video-tapes of teaching sessions to identify the objective the teacher had for the lesson, and describing a teaching session through interaction analysis.

As a follow-up of the session at Hanover, several sessions were planned to meet with two separate groups. One group was composed of the social studies department head (secondary), an elementary teacher, and an elementary principal. The other included the English department head (secondary), an elementary teacher, and the Junior High principal.

The purpose of these sessions is to make the participants knowledgeable about the many facets of the development and use of behavioral objectives in their respective disciplines. They in turn will be the driving force in initiating and conducting workshops in their district.

The first such session was held on December 8 with the next session scheduled for January 7.

Summary

The reaction, as indicated on the evaluation sheets for the various introductory workshops, has ranged from good to excellent, but this is just the first step. Teachers involved in a specific program

are expected to develop objectives for that program, and are questioned about objectives they have for the lesson being observed. There is then a carry-over from the initial workshops. In visitations to those experiencing the workshops but not involved there is no evidence that they are writing and using behavioral objectives.

It is suggested that a core of people in the school district be trained, especially the building principals, curriculum coordinators, and department heads. They then can be instrumental in the development and continued use of behavioral objectives in their districts with only limited consultant help from the SPEEDIER staff.

Instructional Objectives Exchange

From July 7 to August 1 Mr. Baer attended an institute in the preparation of instructional objectives conducted by the Instructional Objective Exchange, a division of the Center for the Study of Evaluation held at U.C.L.A.

The Institute had two phases. The first phase was the training of participants in writing instructional objectives and to qualify them to train others in the development of objectives.

The second phase was the writing and evaluation of objectives for the different disciplines in order to establish collections of objectives that could be disseminated throughout the country for the use of classroom teachers.

Objectives were developed for mathematics, reading, English literature, language arts, auto mechanics, social science, biology, health, music, and physical education.

Of the forty educators involved, Mr. Baer and five other co-workers were instrumental in writing or evaluating the collection in social science. This collection dealt with geography for grades K-9 and contains 158 objectives at present.

As the collections are published each participant receives sets of the objectives and measurement items. The collections received have been made available to interested districts. Several districts have already ordered copies of the available collections for use and evaluation by their teachers.

Chronological Summary

Date	District	Discipline
June 16-19	Miscellaneous group	Elementary Social Studies
June 25*	Conestoga Valley	Nebraska Language Arts
August 22*	Annville-Cleona	Minnesota Social Studies
August 27, 28	Miscellaneous group	Taba Social Studies and Fenton Social Studies
August 29	Wilkes-Barre	Taba Social Studies
September 3, 6	Hempfield	Taba Social Studies
September 20	Penn Manor	Taba Social Studies
September 22	Messiah College	Home Economics (student teachers)
September 27	Wilkes-Barre	Taba Social Studies
October 4	Penn Manor	Taba Social Studies
October 20	Palmyra	Interdisciplinary
October 27	Hanover	Interdisciplinary
November 3*	New Holland	Nebraska Language Arts
December 8	Hanover	English and Social Studies

* The sessions are covered in the reports for the specific programs involved.

Section G

Securing of Diversified Materials

SECURING OF DIVERSIFIED MATERIALS

Materials were obtained by SPEEDIER for the Nebraska Language Arts, Taba, and Minnesota Social Studies Curriculums as specified in their contracts. This entailed approximately sixteen thousand dollars worth of books and filmstrips for all the school systems participating in the programs. Each item was to be labeled as to program, grade, unit, activity, and school.

Having ordered through a jobber last year and having been dissatisfied with the tardiness of the second shipment, the librarian decided to send orders for this year's programs directly to the publishers. It is estimated that three months would be needed for receipt of all materials after the orders were sent.

In order to facilitate the handling, we decided to use a McBee Key Sort Card for each item, listing title, publisher, program, grade, unit, activity, and schools to receive each book. With this method it was easier to note problems, reports, and the step each book or filmstrip held in the order to delivery process.

Before orders could be sent, it was necessary to determine which of the necessary books the school libraries had in their holdings. Lists were compiled of those items which were specified for illustrating the objective of an activity and these lists were checked against the school catalogue. Problems arose with schools which failed to return their lists by the specified deadline. One or two schools had to start programs without all their materials because of late ordering.

Materials started arriving ten days after orders had been posted. The avalanche and back-up of materials which we had anticipated never materialized. Each item was unpacked and labeled within twenty-four hours or less after delivery to SPEEDIER. Once labeled, the books were arranged in cartons according to sequence of use.

The success of our system was tested by the number of questions we received once the books were delivered and schools were billed, which was done in two phases. The problems encountered were few and minor, requiring no more than consultation with the cards for the items, all of which had been noted during each step of the process.

There were one or two school systems which decided to order additional sets of materials or had switched grade levels in the programs and needed other materials. One or two communications errors occurred, but these were minimal.

Ordering films posed problems of a different nature. Once identified the films had to be checked for in the Regional Information Center Materials Catalogue which is supported by the area schools. Arrangements for multiple bookings at one time had to be made along with a routing schedule so that the film could be delivered to one school and then forwarded to successive schools needing the same film. Such a system relies upon the adherence to the schedule by the participating schools.

Those films which were not available through the RIMC had substitutions made from among the IMC holdings. There were films for which this was not possible because nothing IMC had covered the required topic. In such cases, the schools conducted the programs without these films.

The bookings were done through November. None of the films for following units are available through the RIMC, thus procurement will have to be done through other distributors.

The materials aspect of the curriculum programs has been handled in the easiest way possible. Cases can be made equally for ordering books directly or through a jobber.

With sufficient time available, using a jobber is preferable because only one order for all materials need be sent. When supplier-to-SPEEDIER delivery time is limited, direct ordering seems to be preferable because of jobber policy of delivering the second shipment three months after the first. If this policy were otherwise, ordering through a jobber would have the advantage.

Section H

SPEEDIER Library

LIBRARY REPORT

Since the last report the library has been moved back to the smaller room where it was first housed. The quarters are more cramped, but they are functional. When first organized, the library was conceived as an information center for teachers in the area who could inspect materials and do research for themselves. The call for such services has been slight. A quantity of factors can be at play here. Perhaps the availability of large collections at Millersville, Shippensburg and other colleges renders our collection unnecessary to the outside user. The fact that SPEEDIER covers a four-county area, necessitates a long drive for many people. Teachers may also not feel a need for the kind of information we offer. Those who have come in have most often been interested in specific curriculum programs sponsored by SPEEDIER.

Due to the slight use made of the SPEEDIER library by outside users, we have reconsidered our library policy in regard to acquisition. We select in terms of in-house use rather than anticipating potential demands by outside users.

SCHOOL LIBRARY RESEARCH REPORT

SPEEDIER's research librarian conducted a survey on the state of library services in local schools as viewed by the librarians. The following report is a partial analysis of the findings. Greater detail is available to librarians on request.

The curriculum programs of the sixties require students of all ages to spend more of their time than ever doing independent research before drawing conclusions. The day of the single textbook with the chapter summaries is disappearing. A consequence of this is that the quality of library services had direct bearing on the scope and validity of classroom investigation.

Because the success of the language arts and social studies programs depends in large part on the library services in our schools, a study was conducted in the spring to assay these services. The results range from the promising to the dismal. Per pupil expenditures for books are generally substandard, being between three and five dollars, but close to seventy percent of the libraries have between seven and ten books per pupil which says something about librarians' abilities to stretch the dollar.

Adequate library service for two libraries a week by one librarian is possible but when the number goes beyond that figure, it seems unlikely that she can do anything more than supervise book circulation. Forty-six percent of the high school libraries surveyed and fifty-three of the elementary school libraries have no clerical help. On the elementary level, seventeen percent of the librarians work in two schools a week; twelve percent work in three schools per week; and nine percent work in four and six schools per week. Six percent work in five, seven, and nine school libraries. Certainly, there can be little creative or curriculum-oriented use of the library when the librarian is seldom there.

Faculty use of the library is a good barometer of its value to the school. On the elementary level, more than half of the librarians estimate that fifty percent or more of the faculty make regular use of the library. Fifteen percent of the high school librarians estimate that fifty percent of the teachers make regular use of the library.

When asked to pinpoint the most pressing problems, librarians most often cited the problems of day-to-day operations. Lack of space and clerical help emerge in first place. This would indicate that librarians are placing too much emphasis on the mechanical aspects of librarianship, or that school systems are supplying truly inadequate facilities to properly fulfill the library functions. After visiting numerous libraries, one is inclined towards the latter conclusion.

Looking to the brighter side, eighty-two percent on the elementary level indicate that they have a planned curriculum for teaching library skills and seventy-two percent indicate that they work with teachers in planning library assignments for units being taught in the classroom. This is a healthy sign that the libraries are being used as adjuncts to the curriculum. With the mitigation of mechanical problems this figure would no doubt grow.

The statistics offered here are only a sampler of those gathered as a result of the survey which in itself had close to seventy percent return, reflecting the interest librarians take in their work. Considered as a whole, library services in the area have their strong points, but, as teachers diplomatically put it on report cards, they "can do better."

Section I

Individualized Learning Systems

INDIVIDUALIZED LEARNING SYSTEMS -- MARCH 31 - JULY 3

Introduction

The time period March 31 to July 3 represents the final stages of acclimatizing the four-county area with the concepts of individualization. Plans for the second stage, utilization of specialists and "implanting" techniques have been discarded because of the reduction of Title III funds. Therefore, all previous planning for expansion and evaluation of this segment of SPEEDIER's work was stopped and the Individualized Learning Specialist began closing operations earlier than anticipated.

Future School Series

On March 31, 1969, the conference entitled "The Changing Role of the Teacher" (appendix) brought into focus the relationship of the teacher's role and the learner's role in the assessment process. Standardized tests, self-evaluation of both the teacher and the learner, informal tests, classroom climate assessment, and other diagnostic and prescription techniques were covered. Films, small group discussions, and lectures gave the participants an opportunity to see, hear, and interact with others about the concepts covered. National consultants such as Dr. Richard Cox from the Research and Development Center at the University of Pittsburgh and William Reynolds from the University of Pennsylvania assisted the participants. The evaluation of the conference was "good" (appendix).

On April 28, 1969, the fifth and last conference was held. One other conference for May was cancelled because May 26 was too close to the end of the school year, and it was felt that teachers and administrators would be too involved in closing out the school year. Thus, "A Break with the Past" (appendix) became the conference in which major innovative approaches such as Apex, Project PLAN, KEY, and LAP were viewed and discussed. Major emphasis was placed upon individualized learning. This conference utilized a greater variety of conference and workshop techniques than the others; further, it utilized more consultants. All of the SPEEDIER professional staff worked with the participants. The conference brought into play a

high degree of involvement; thus, two evaluation forms were developed, and the results (appendix) indicated a 90.4% of good-to-excellent rating, the highest rating of any of the conferences.

The Future School Conferences were intended to acquaint the participants with the concepts involved with individualization, to present some major innovative practices, and to stimulate the participants to think creatively about their own school system in terms of the change process. The "conference" is not an end in itself, and the success or failure of a conference should be measured by the amount of change generated. In order to weigh this notion, follow-up activities needed to be pursued. Plans to write a questionnaire, make personal contacts, provide consultant services to those participants aware of concepts but in need of skill development, assess the change generated, disseminate speeches in booklet form, and develop multimedia packets collected from conference consultant materials had to be disbanded. It should be noted, however, that many favorable comments have been made, educators are discussing individualization, and at least 12 schools have made attempts to indivize. Video-tapes from the conferences have been used and copied as have been the audio-tapes. The films shown have been rented, visitations to innovative school districts have been made, and concultants at the Future School Series have been used at local school districts. It appears the conference series has met its initial objectives.

Demonstration School

The final phase of training of the Susquehannock teachers concerned:

(1) packets dealing with concepts

(2) communication of individualized goals to staff, students, community, and other schools

(3) continued packet production

(4) relationship to SPEEDIER

(5) sensitivity training

Minutes were kept through April only, since the May sessions concerned T-group sessions, a conference, and a final session here at SPEEDIER (appendix).

The teachers have made eight presentations of their program to varied audiences. The basic format is the one established and which appears in the April 16 minutes. Audio- and video-tapes of this presentation are available. In addition, the teachers presented their program at the final Hershey Conference.

Since the conditions under which the Susquehannock teachers were trained needed to be specified and isolated for research purposes and systematic publicity releases, detailed minutes were kept for analysis. An evaluative instrument might have been developed and tested under conditions similar to those at Susquehannock. However, since the Learning Specialist's services are crucial to the interpretative data, this segment of the program has been discontinued. Plans for taping further individualized instruction meetings were also discontinued.

Twenty packets have been written. The teachers have identified 190 packets to be produced, and assignments have been made for their summer production. Moreover, identification has been made of Peter Marks and Carolyn Adams as two part-time Individualized Learning Specialists who will work with SPEEDIER in a minimal capacity during the school year 1969-70. The school is now ready under limited conditions to serve as a demonstration school for SPEEDIER.

Workshops

Reading Council activities were restricted to the Harry B. Gorton year-end banquet held April 18 at Avalong Restaurant. Since SPEEDIER's assistance with this Council was established primarily to increase membership and demonstrate organizational procedures, all actual work such as fliers, agendas, outside speakers, etc., was taken care of by the Council members. SPEEDIER provided consultant services and a speech indicating the future direction to be taken by the Council.

Hempfield School District requested SPEEDIER to present a workshop on April 18, 1969. An Individualization Packet was developed for the elementary social studies teachers (appendix). The results of the individualization section can be found in the social studies report. The general response was very positive.

School District Involvement

Three school districts who had been sending teacher and administrator representatives to the Hershey conferences, became interested in the individualization concepts and requested consultant services. Annville-Cleona initiated a series of meetings with the Individualized Learning Specialist to develop a program for seventy terminal students in a team-taught situation. Social studies, science, and English materials would be developed. A proposal (appendix) was developed, submitted to their Board of Education, and approved. A program similar to Susquehannock began March 27. Several meetings were at SPEEDIER's offices and at the high school, since the teachers' time was limited.

The second school to become involved was the Palmyra Middle School language arts staff. On April 10, the first meeting was held. Several meetings followed, and like Annville's, their proposal was written and submitted (appendix). Where Annville has three teachers, Palmyra has nine who will be developing individual students packets.

School district number three was ELCO. There the social studies department wanted to individualize. No proposal was needed, so work began immediately on the concepts. Within four or five meetings, a packet was developed, several skills and concepts identified, and objectives stated.

Summer Production Workshop

The three school districts, along with Susquehannock - the demonstration school, -and Penn Manor enrolled in SPEEDIER's Packet Production Workshop. Penn Manor and Palmyra received teacher reimbursement through Title I funds. Annville-Cleona and ELCO are assuming their own teacher's pay responsibilities while most of Susquehannock's expenses will be paid by SPEEDIER since this was a commitment made at the initiation of the training period in September.

The workshop was developed to include small group, large group, and independent study activities. Since Susquehannock teachers have been re-trained by the SPEEDIER staff, they will not only be required to produce packets, but they will also be expected to assist the other school districts in their production efforts and conduct the large group sessions. There were a

total of 80 teachers from 12 different schools, K through 12, taking part in this workshop. Since the amount of time varies with teachers and schools and since teachers need to be in their own buildings where their materials are, a flexible schedule was developed (appendix). A packet of materials on individualized learning concepts was assembled very similar to those materials used previously at Susquehannock.

In addition, two graduate hours of college credit at Millersville State College were granted for those participants enrolled in their graduate school or who wished to enroll. SPEEDIER initiated the precedent-setting procedure of receiving off-campus credit by an off-campus instructor. Teachers received credit for developing materials to be used in their classrooms.--a direct relationship between the college and the public schools which it serves.

Samples of production materials from each school (appendix) represent only a portion of the work developed by the participants. It is obvious that the skills of the teachers need a great deal of refinement and the teachers themselves need assistance not only from content specialists but strategy specialists. Teacher re-training and skill development take time -and <u>qualified</u> assistance.

An evaluation form and interpretative data (appendix) indicate significant progress for the limited time provided for teacher re-training. Again, a start has been made, but further follow-up by qualified consultant services and released teacher re-training time are essential to meaningful change.

<u>Summary to July 3, 1969</u>

Title III funds reduction curtailed further development of individualized learning plans; thus, when the Summer Production Workshop ends, any major effort in this area will not be possible. However, identification of two very capable specialists from the Susquehannock staff may make it possible for limited feedback from the demonstration school as well as minimal support to the other four school districts involved in developing individualized learning materials.

SPEEDIER assistance to the demonstration school should include the following:

(1) Develop a visitation and feedback form

(2) Develop a teacher evaluation instrument

(3) Develop a student evaluation instrument

(4) Write an assessment study of individualized learning concepts' progress

(5) Direct program changes

(6) Disseminate research findings

(7) Disseminate packet production findings.

SPEEDIER use of individualized learning specialists should include the following:

(1) Exchange packets with ELCO, Palmyra, Penn Manor, and Annville-Cleona through periodic visits

(2) Lend active assistance in insuring skill development of the individualized learning concepts

(3) Solicit other teacher and school involvement

(4) Act as liaison between demonstration school and SPEEDIER

(5) Disseminate findings.

If the above services can be carried on, perhaps this year's time, money, and efforts might be partially salvaged for the four-county area. It is indeed regretable that despite the recommendations of the SPEEDIER Evaluation Team monies were not allotted "So that services and programs will not have to be curtailed..."

Progress Report - July 3 - January 1

With the departure of the Individualized Learning Specialist, SPEEDIER's direct involvement with local school districts became highly passive. It is important, however, to follow-up the activities started to assess the change effect generated by this program.

The five actively involved schools have been contacted and asked for progress reports. These appear below.

Annville-Cleona District - A program has developed for use with approximately seventy terminal students built around activity packets in language arts, social studies, and science. The program has been very successful to date. The teachers are highly encouraged by the involvement of students who have never shown academic interest before. The teachers are in the process of writing more packets to continue throughout the school year. It has been found that a lower teacher-pupil ratio than originally planned is needed. Plans are to continue the operation next year with some modifications.

ELCO School District - A very intensive program is now underway with all social studies students on the seventh and eighth grade levels. The activity packets, called contracts, are the primary mode of instruction in social studies for the pupils. The present plan involves the refinement of one hundred and twenty packets next summer and the expansion of the activity packet concept into their new middle school. The new facility has been designed around the individualized learning concept with inner-open wall construction for flexibility.

The content utilization of the packets is highly instructional. This allows the boys and girls to choose those activities they desire to do. A planned modification includes a structuring of certain required packets followed by an elective phase.

Palmyra Area Schools - The learning activity packets are actively being used at the junior high school level. Students are working individually in language arts, social studies, math and science. Some of the teachers are still involved in the production of new packets. The overall interest of the professional staff has increased to a point where the use of these materials may be expanded. Some packets are also being used in reading on the elementary level.

Penn Manor School District - This district had planned to use the learning activity packets in their new middle school to have been opened September, 1969. Even though the new facility will not be ready till January, 1970, the teachers are making use of the packets now. The response to the concept has been very positive. Teachers trained in developing packets have met with other staff members to share their expertise.

Plans are being made to vary the media required for packet use. Presently the emphasis is on books and pamphlets.

Southern York School District - The initial program development of the Learning Activity Packet was in this district. Language Arts instruction, grades 9-12, is based on the packet concept. A number of visits and communications from within the four-county area have been directed toward the district.

A modification is planned to the ninth grade approach. Rather than pure packet instruction, a transition program will be designed with more traditional approaches coupled with the activity method. The teachers believe this will enhance the operation of the remaining program.

SPEEDIER has served as a dissemination center for completed packets. Requests for over two hundred packets have been received from seven school districts. Six of these have not been involved in packet development.

Based on the reports from the schools involved in individualizing instruction through the use of packets, it appears likely that expanded programs will be developed. It is possible that other schools will begin developing their own individualized learning systems as success is achieved by the five involved centers.

Section J

Model Management System

SPEEDIER MODEL MANAGEMENT SYSTEM

Introduction

For many years educational systems have operated without specific pre-planned strategies for change. Research evidence shows that there is a long lag between the development and testing of new ideas and their adoption by a large percentage of educational systems. It seems important then to develop some planned strategies for introducing new programs to local school districts. It was on this assumption that SPEEDIER was organized. If, during its operation, SPEEDIER is successful in producing changes in the schools, then perhaps a model should be developed for its operation. A model is needed in a form that is meaningful to educators and simple enough to be transplanted to other parts of the country.

With the foregoing in mind, techniques and formats were examined to determine how best to meet the felt need. Study showed that planning for change requires astute management and planning on the part of the organization. Because of this, industrial project management applications were examined to determine the applicability of adapting or modifying some of their methods. Two seemed particularly adaptable. The Program Evaluation Review Technique (PERT) and the Critical Path Method Management (CPM) Systems appeared promising. Some work had already been done by Dr. Desmond L. Cook of the Ohio State University on the applications of PERT to education. A review of the literature showed that no direct application of management techniques to an organization like SPEEDIER had been done.

After careful consideration it was decided that SPEEDIER would modify its use of PERT and CPM to fit its own needs. The plan was to develop a Model Management System (MMS) that could be used to plan for change to occur at a given time, to help in the allocation of resources to perform the changes, to help predict problem areas in time and materials that might arise, and to help in establishing on-going priorities. It is hoped that on completion of the MMS it will be applicable for dissemination throughout the country as a model of a project designed to bring about educational change.

Development of MMS

The development of a MMS for SPEEDIER was designed to include four separate phases covering approximately one year's time interval.

Phase one included those items listed below in the Project Breakdown Structure (PBS) Phase I.

P.B.S. PHASE I

1. Introduce project management techniques.
2. Study PERT.
3. Train project manager.
4. Identify organizational structure.
5. Develop project breakdown structures for Phases II-IV.

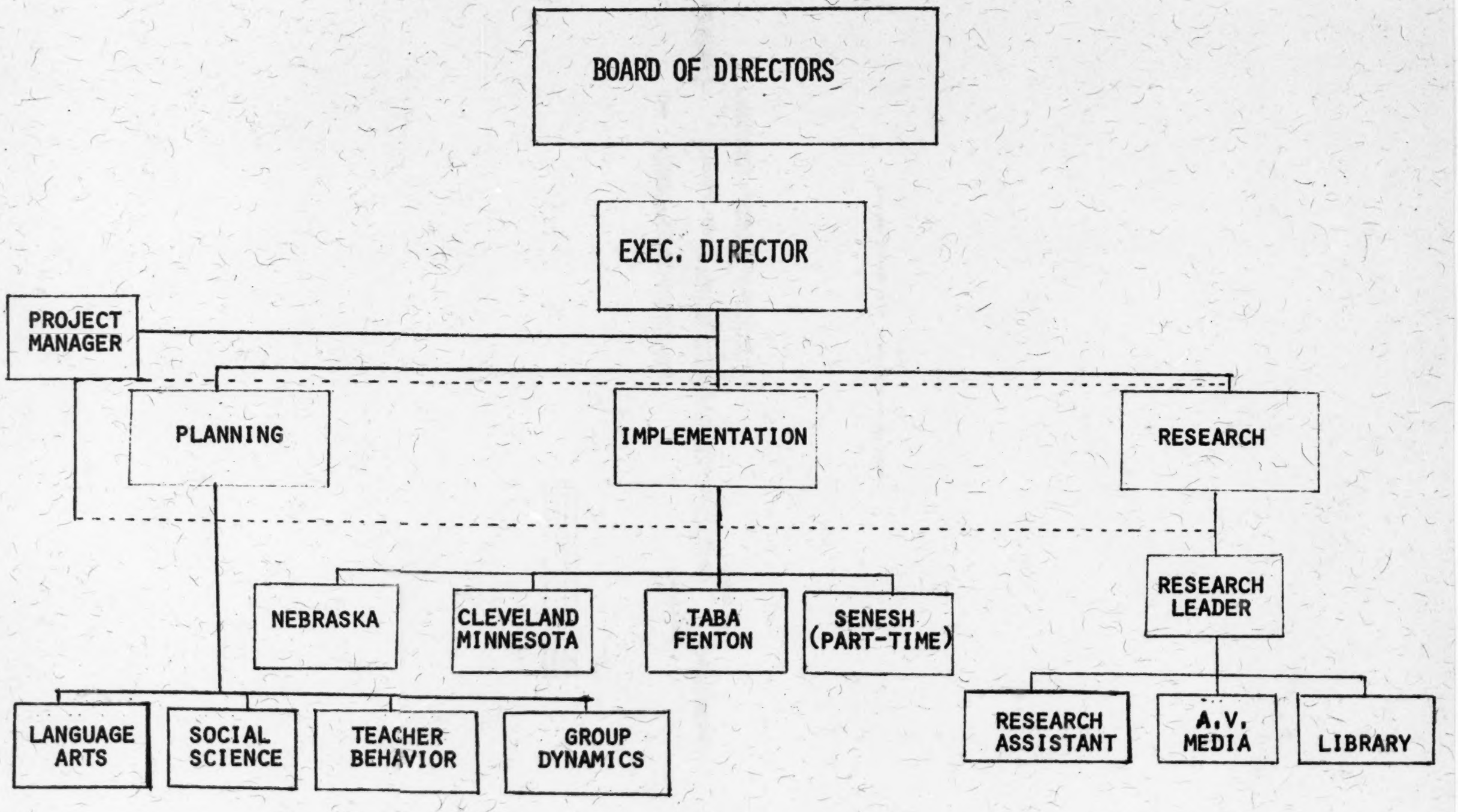
Items 1, 3, and 4 were partially accomplished through the training of the MMS project manager. This was accomplished by attendence at a Booz·Allen and Hamilton project management seminar. Item 2 was fulfilled by individualized study of PERT--Program Evaluation Review Techniques. This book was developed by Basic Systems Incorporated of New York City. Item 5 was completed by the MMS project manager after completion of numbers 1 through 4. As part of Phase I, a general network was developed to show how a MMS could be evolved describing SPEEDIER. Along with this a proposed SPEEDIER Project Management Organizational Chart was made. Those items appear on the following pages.

Phase II Project Breakdown Structure (PBS) included a complete review of those activities in which SPEEDIER had been engaged. The individuals who were responsible for the activities completed the reports. PBS Phase II appears below.

P.B.S. PHASE II

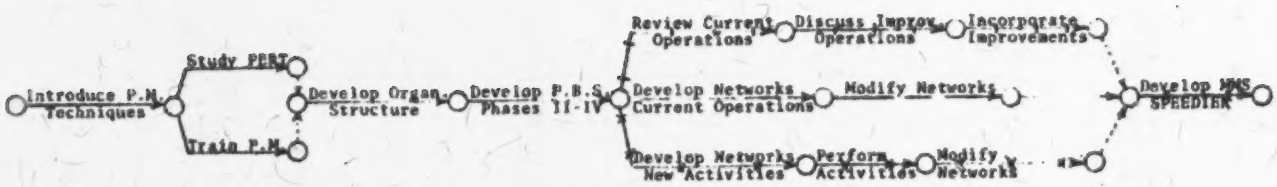
1. Identify participating districts and teachers.

(PROPOSED) SPEEDIER PROJECT MANAGEMENT ORGANIZATION

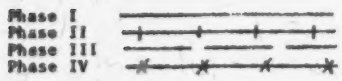


PHASE I

NETWORK FOR THE DEVELOPMENT OF AN MMS FOR SPEEDIER



Key



2. Report pilot activities to date.

   a. Fenton Social Science
   b. Greater Cleveland Social Studies
   c. Senesh Social Studies
   d. University of Minnesota Social Studies
   e. Taba Social Studies
   f. Nebraska Language Arts

3. Report other activities.

   a. Individualized learning systems
   b. Current innovations in education
   c. Sensitivity training
   d. Micro-teaching
   e. College advisory committee
   f. Publications
   g. In-service training day workshops
   h. Consultant services
   i. I.B.M. writing laboratory
   j. SPEEDIER library
   k. Educational quality assessment
   l. M.A.P.P. project for the D.P.I.
   m. Minority group report
   n. Future School series

4. Report on:

   a. Strengths
   b. Weaknesses
   c. Self-evaluation

These reports were read by staff members and discussed. Based on these discussions a self-evaluation ensued emphasizing apparent strengths and weaknesses of the project. With these in mind some idealized activity networks were developed based on a six point assessment of the activity.

Phase III PBS shows in number 1 the six steps utilized in network development.

P.B.S. PHASE III

1. Project manager discusses activities with person responsible for each. The following items to be included:

   a. Conception
   b. Definition
   c. Design
   d. Development
   e. Utilization and operation
   f. Evaluation

2. Develop networks for applicable Phase II activities.

   a. Pilot programs
   b. Current innovations in education
   c. Micro-teaching
   d. Publications
   e. Library establishment
   f. College advisory committee
   g. Individual learning systems

3. Modify these networks based on experience.

The MMS project manager discussed the activity, as listed in number 2, with the responsible person. The conversation centered around the sub-activities involved in the main function and the possible sequencing of events. The MMS manager then developed an activity network as seen by him. This was then discussed with the individual responsible for the major function. Any required changes were made based on mutual agreement. This portion of the development proved very important. Many new approaches developed and were incorporated in the networks based on this two way communication.

The General Plan for Pilot Development and its included Network for Materials Organization-Pilot Program were the first two developed for the MMS. Standard PERT/CPM Technique was modified at this point. Instead of describing the activities near their representative arrows, the network plan was modified to include a separate listing of the activities with appropriate numbers placed on the network. This proved more satisfactory. The modification of the Ordering Materials Network and the remainder in Phase III were completed in this fashion. Because of additional involvement, a network not listed on the PBS Phase III was developed for Lebanon City. This was entitled "Network for Determining the Educational Needs of the Lebanon City School Community".

The following pages include the network for Phase III of SPEEDIER's MMS.

Phases I through III have been completed at the present time. Phase IV is still underway. Much of Phase IV involves June, 1969 and Summer, 1969 functions. It was decided that after the PBS was developed, that for both June and Summer Workshops, an Idealized Network could be developed rather than one for each specific program. In some cases, the person responsible for the function desired to develop a network to help crystalize his planning of the program. This proved to be helpful to the persons involved, particularly with respect to detailed sequencing of events. Below is the PBS for Phase IV.

P.B.S. PHASE IV

1. Develop networks for June workshops.

    a. Understanding and developing individualized instruction packets.
    b. Developing behavioral objectives in Elementary Social Studies.
    c. Introduction to self-awareness programs, elementary administrators.
    d. Evaluating elementary language arts curriculum teachers.
    e. New curriculum trends and implications for the library, elementary.
    f. The operation and use of the video-tape recorder.
    g. Introduction to self-awareness programs, secondary administrators.
    h. Understanding new elementary Social Studies programs.
    i. Changing language arts programs in the secondary school.
    j. Evaluating elementary language arts curriculum, administrators.
    k. New curriculum trends and implications for the library, secondary.
    l. Understanding new secondary social studies programs.
    m. New elementary language arts programs in reading.

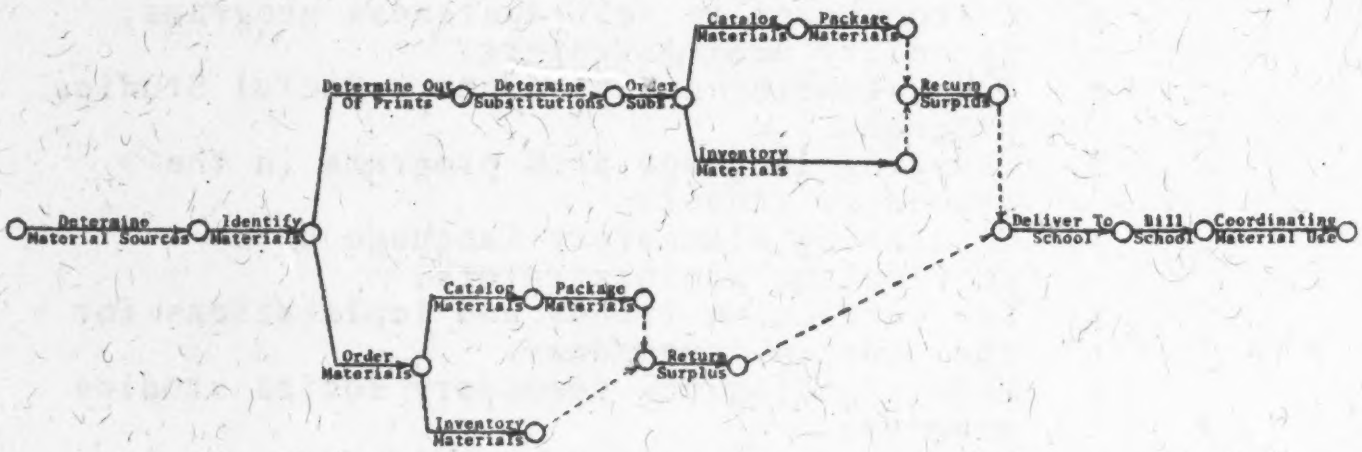
PHASE III

GENERAL PLAN FOR PILOT DEVELOPMENT

*Detailed Network Completed

PHASE III

NETWORK FOR MATERIALS ORGANIZATION - PILOT PROGRAM



ACTIVITIES FOR DETERMINING AND ORDERING MATERIALS FOR PILOT PROGRAMS

Section A -- Identification of Guides and Materials

1. Determine the curriculum guides to be used.
2. Identify the materials contained in the first guide.
3. Identify the materials contained in other guides. This activity begins a sequence that parallels the activities that follow activity number two and can occur concurrently.
4. Check to make sure that there are materials available for each activity listed in the first guide.
5. If no materials are listed for an activity, re-check the guide for required materials.
6. Prepare special inventory cards with author and title or other identifying information about materials needed.

Section B -- Identification of Material Sources

7. Identify sources and costs of materials that are needed.
8. Mark special inventory cards with source and cost of materials identified.
9. Develop a list of primary materials needed for the first unit.
10. When identifying sources and costs of materials, those that have been listed in the guides that are no longer available will be determined.
11. Determine substitutions for primary materials not available.
12. Prepare special inventory cards with author and title of substituted materials.
13. Identify sources and costs of substituted materials.
14. Modify special inventory cards to include source and cost of substituted materials.
15. Make up a list of substituted materials for the first unit.
16. If when determining sources and costs of substituted materials the substitutions are not available, then a recycle must begin, going through activity number ten and the following sequence for substituted materials.
17. The list of substituted materials for unit number one, at this point, can be incorporated with the list of primary materials to form one listing of materials required for unit number one.

18. Determine method of using inventory cards.

19. Check school district for availability of materials that are contained on the list of needed materials for unit one.

Section C -- Ordering and Delivery of Materials

20. Place order for materials in unit number one.

21. Unpack and check invoices of materials for unit number one.

22. Pay bills from suppliers.

23. Determine from invoices which materials that were ordered are no longer available.

24. Recycle activities to number eleven so that new substitutions can be determined.

25. Label materials that have been received and update special inventory cards to note items received and items unavailable.

26. Separate materials for delivery to the schools.

27. Prepare the materials for delivery to the schools.

28. Deliver all of the materials for the first unit to the schools.

Section D -- Terminal Activities

29. Update special inventory cards to show materials that have been delivered to schools.

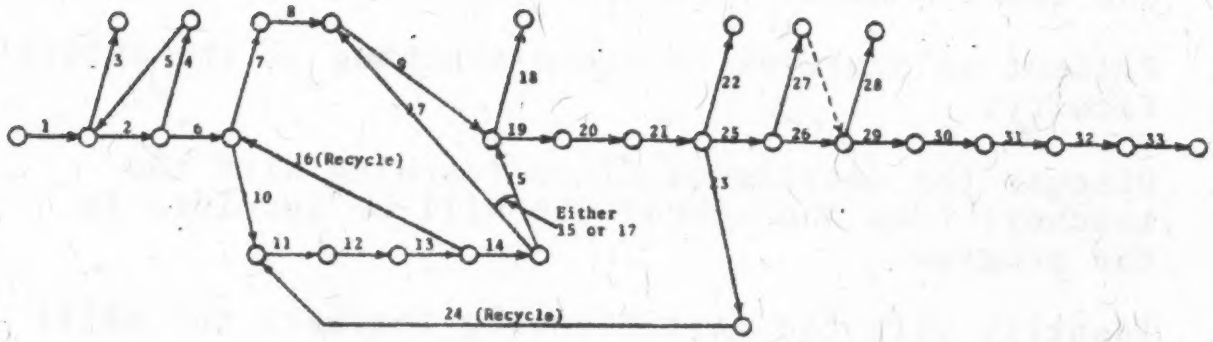
30. Sort the special inventory cards in preparation for billing of the schools.

31. Prepare bills for the materials delivered to the schools.

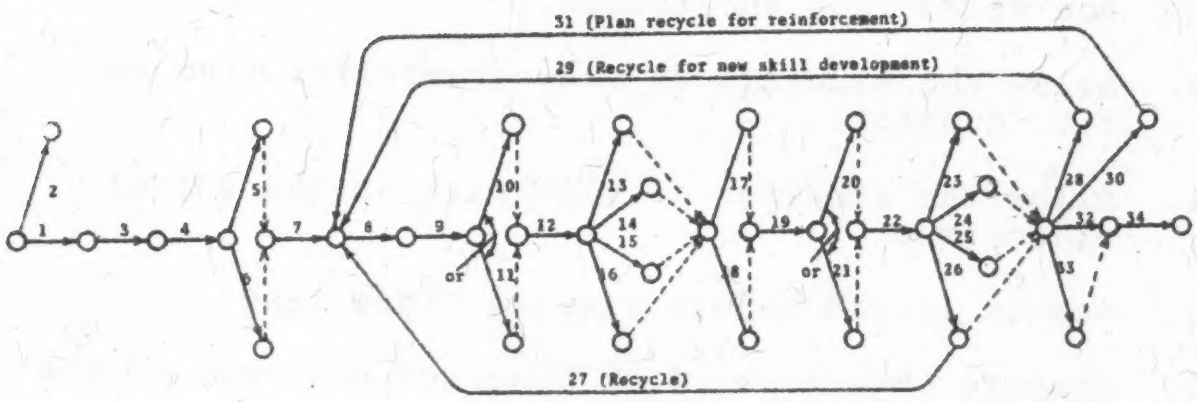
32. Update special inventory cards to show which schools have been billed.

33. Update special inventory cards to show when payment has been received from the school district for materials for the first unit.

NETWORK FOR DETERMINING AND
ORDERING MATERIALS
FOR
PILOT PROGRAMS



NETWORK FOR THE IMPLEMENTATION OF
MICRO-TEACHING IN A SCHOOL



IMPLEMENTATION OF MICRO-TEACHING IN SCHOOLS

Section A -- Introduction to Micro-Teaching

1. Identify a school in which micro-teaching will be utilized.

2. Identify other schools in which micro-teaching will be utilized. The activities following number two will be exactly the same as those following number one and can occur concurrently.

3. Present an overview of micro-teaching to the entire faculty.

4. Discuss the details of micro-teaching with the teachers from the school who will be involved in the program.

5. Identify with the participating teachers the skill areas for practice.

6. Provide participating teachers with consultant services to decide on skill areas to be practiced.

7. Determine the logistics of micro-teaching within the school. This will be carried out by the local school administrator.

Section B -- Actual Micro-Teaching

8. Plan a short lesson (5 to 7 minutes) emphasizing desired skill.

9. Teach the micro-lesson to five to seven students and video tape the lesson.

10. Allow the students to view themselves live on T.V. monitor.

11. Allow the students to view part of the actual video-tape.

12. Assess lesson before viewing video tape.

13. Compare objectives with observed outcomes of the lesson.

14. View the video tape either alone or with an outside observer.

15. Perform a self-assessment of the video tape determining what are considered to be the strong and weak points.

16. Determine those areas where there is a felt need for modification of behavior.

17. Plan the re-teach lesson.

18. Identify and incorporate specific modifications in the re-teach lesson.

19. Perform the re-teach lesson with incorporated modifications.

20. Allow the students to view themselves live on T.V. monitor.

21. Allow the students to view part of the actual video tape.

22. Assess lesson before viewing video tape.

23. Compare revised lesson with the desired outcome of the lesson.

24. View the video tape either alone or with an outside observer.

25. Perform a self-assessment of the video tape determining what are considered to be the strong and weak points.

26. Determine if more practice is needed with the desired skill.

27. Recycle for more practice with the desired skill beginning with activity number eight.

28. Select a new skill area for practice.

29. Recycle the micro-teaching to center on the new skill area development. Begin with activity number eight.

30. Plan for later reinforcement of the acquired skill.

31. Plan the recycling for reinforcement of the desired skill. Begin with activity number eight.

32. Assess micro-teaching activity based on desired outcomes.

33. Use practiced technique or skill in the full classroom situation.

34. Plan for follow-up assessment procedures.

ACTIVITIES FOR DEVELOPING A BOOKLET FOR CURRENT INNOVATIONS IN EDUCATION

1. Ascertain the need for developing a booklet of current innovations in education.

2. Develop the objectives of the project.

3. Meet with the research staff and determine individual responsibilities.

4. Determine possible sources of information and the format for recording it.

5. Begin gathering data and developing categories.

6. Meet with the research staff and discuss problem areas encountered. Determine any re-direction that may be necessary in the research effort.

7. Identify general search strategies being used.

8. Perform a literature search of ERIC, Pace Setters in Innovation, and Title III Abstracts.

9. Search the Educational Index, Dissertation Abstracts, and Reader's Guide to Periodical Literature in the desired areas.

10. Make personal visits to institutions and/or agencies involved in educational research that are in the immediate area. Write to other places where information might be available.

11. Use the information retrieval services of R.I.S.E.- "Research Information Services for Education".

12. Meet with research staff to develop sub-categories based on items located during search.

13. Develop final major categories and sub-categories.

14. Appoint a booklet coordinator who assumes the responsibility for the final booklet preparation.

15. Booklet coordinator checks the consistency and completeness of the data cards. Duplicate cards are removed.

16. Recycle to activities 8, 9, 10 or 11 if there is insufficient information on the data cards.

17. Prepare a rough draft on the IBM Mark IV MT/ST typewriter. Information thus typed is stored on the magnetic tape.

18. Have the draft screened by the appropriate curriculum specialist of SPEEDIER.

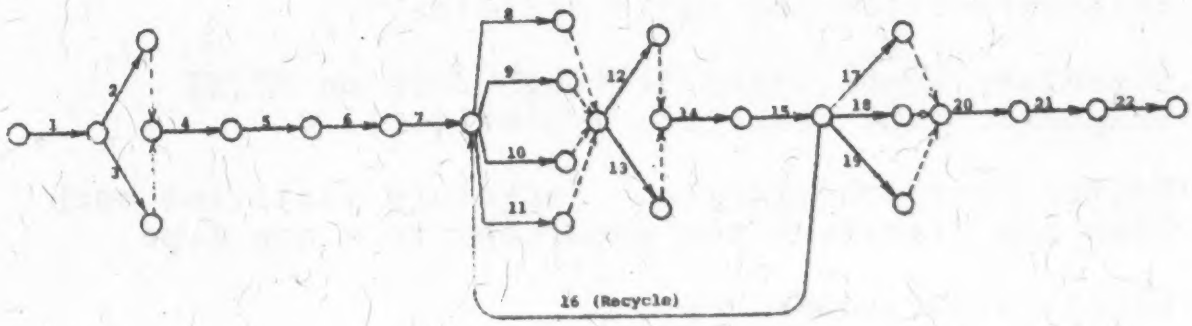
19. Revise and modify the categories as necessary. Eliminate projects that are not applicable for implementation.

20. Have the final booklet prepared by the clerical staff.

21. Discuss problems related to the development of the booklet and develop plans for continual updating of data.

22. Prepare a detailed report of the completed project.

NETWORK FOR DEVELOPING A BOOKLET OF CURRENT INNOVATIONS IN EDUCATION



ACTIVITIES FOR DEVELOPING MONTHLY PUBLICATIONS

Section A -- Procedures for Initiating Monthly Publication

1. Determine the desired range of circulation.
2. Identify names and addresses for mailing.
3. Determine the type of mailing labels to be used.
4. Arrange for the design and printing of the newsletter masthead.
5. Editor identifies a) past and future events which need to be reported, b) future articles which might be included and, c) announcements which need to be made.
6. Editor consults SPEEDIER staff members for article suggestions.
7. Editor secures outside information needed for news items.
8. Editor identifies applicable photographs for use in publication.
9. Editor determines space allotment for each article.
10. Editor assigns stories to staff members.
11. Staff members write the stories.
12. Editor writes stories.
13. Editor rewrites and edits articles.
14. Secretary types items in rough form on MT/ST (Magnetic Tape Selectric Typewriter).
15. Editor corrects stories. Secretary justifies each line and transfers the good copy to a new tape.
16. Editor proof reads copy.
17. Editor composes headlines and indicates appropriate type style.
18. Secretary types headlines.
19. Set up first issue using typed stencil reproduction method.

Section B -- Procedures for Mailing Monthly Publication

20. Secretary duplicates newsletter mailing labels.

21. Secretaries apply labels.

22. Secretaries sort mailing according to zip code.

23. Secretaries check for duplicate labels.

24. Secretaries correct mailing list (if duplicates are found).

25. Secretaries count the number of pieces ready for mailing.

26. Secretaries find the weight of a single piece of mail.

27. Secretaries wrap and label the mail bundles according to zip code.

28. Secretaries complete post office bulk mailing form.

29. Secretaries deliver mailing to post office.

Section C -- Procedures for Evaluating Monthly Publication

30. Run a time and cost analysis on the preparation and mailing of the first newsletter.

31. Evaluate organization and preparation of the mailing list.

32. Reorganize mailing list and identify alternative techniques for preparing labels.

33. Evaluate organization, preparation and reproduction of newsletter.

34. Identify alternative techniques for preparing and reproducing newsletter.

35. Establish new procedures for monthly newsletter activities.

Based on the evaluative activities Nos. 30-34, it was determined that contracted printing was a more practical method to use for the newsletter. All activities that follow describe the present development of Ideas, SPEEDIER'S monthly publication.

Section D -- Procedures Used for Monthly Publication

36. Complete activities 5 through 18.

37. Editor clips and arranges copy.

38. Editor consults secretary on copy arrangement.

39. Editor glues copy to copy sheets.

40. Language Arts Specialist or Research Librarian proof reads final copy.

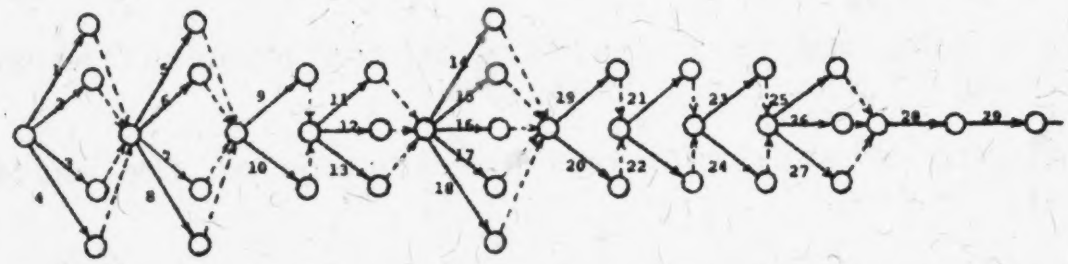
41. Secretary corrects copy if needed.

42. Editor delivers copy to printer.

43. After receiving newsletter from printer proceed with activities numbers 20 through 29 for mailing the newsletter.

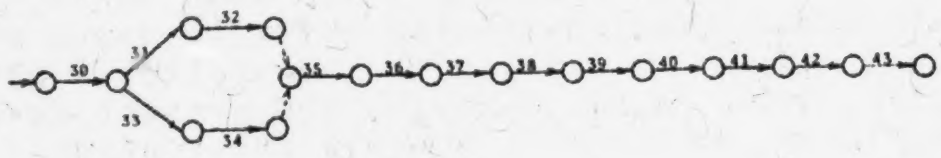
NETWORK FOR DEVELOPING

MONTHLY PUBLICATIONS - PART I



NETWORK FOR DEVELOPING

MONTHLY PUBLICATIONS - PART II



ACTIVITIES FOR ESTABLISHING LIBRARY SERVICES

Section A -- Determining Library Policy

1. Determine the need for a library facility and its scope within the project.
2. Determine the subject areas which the library will be expected to handle.
3. Establish the rationale for the Language Arts collection.
4. Establish the rationale for the Social Science collection.
5. Establish the rationale for the Behavioral Science collection.
6. Establish the rationale for the collection of professional books and periodicals.
7. Determine the type of collection to be established. This would include determining the use of texts, periodicals, selected sets of reference materials, and other items.
8. Determine policies for the selection of periodicals.
9. Determine who will select the titles to be included in the collection.
10. Determine the scope of information that is expected to be handled by this collection.
11. Determine what sources are now available within the area so that duplications within the collection can be avoided.

Section B -- Organization and Development of the Library Facility

12. Select classification system to be used. Consider the applicability of the Dewey system, U.S.O.E. system, or some modification to meet the specific needs of the facility.
13. Select the titles for the reference collection.
14. Order the title for the reference collection.

15. Select text titles and companies from whom they will be ordered.

16. Order text materials.

17. Select periodicals according to needs.

18. Order periodicals directly or through an agency. Orders may be either standing or renewable.

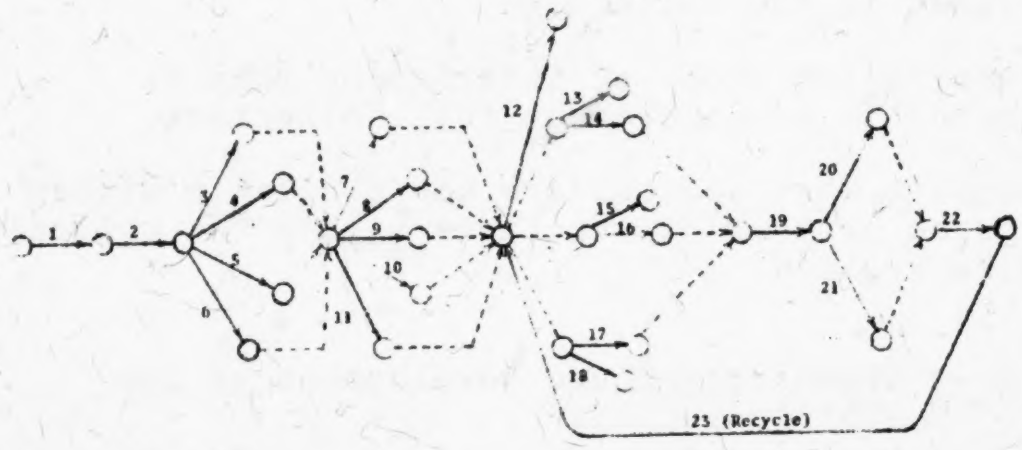
19. Process materials as they arrive.

20. Place materials on shelves according to the established classification system.

21. Set up vertical files when sufficient materials are present.

22. Alert the staff to the library organization.

23. Recycle activities to keep collection current.



ACTIVITIES FOR ESTABLISHING A COLLEGE ADVISORY GROUP

1. Discussion of the need for a college advisory committee among SPEEDIER staff members.

2. Make personal visits to all campuses to explain the reasons for the formation of the advisory group.

3. Identify the contact person at each institution.

4. Discuss with the contact person the nature of the first meeting to include staff personnel at each institution who are interested.

5. Have appropriate college official appoint committee member to serve as representative of that institution on the advisory group.

6. Survey appointed members to establish meeting time for the first session.

7. Select speaker for the first meeting.

8. Discuss exact nature of speakers presentation to motivate group action.

9. Arrange for a meeting site.

10. Arrange format of dinner meeting and send such information to participants.

11. Conduct the first session and determine how often the group should meet and establish dates.

12. Establish revolving meeting sites at participating institutions.

13. Develop underlying philosophy and objectives.

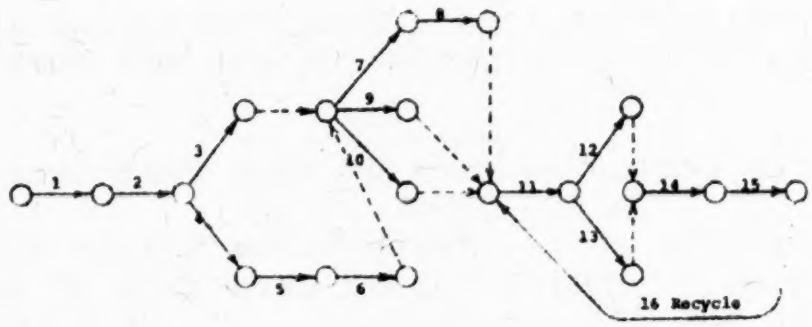
14. Function as an advisory group seeking solutions to identified problems. Meetings held on a regular scheduled basis.

15. Assess effectiveness of advisory group.

16. Recycle activities, if necessary, based on outcome of assessment procedure. Begin with activity number 11 and conduct a new series of meetings.

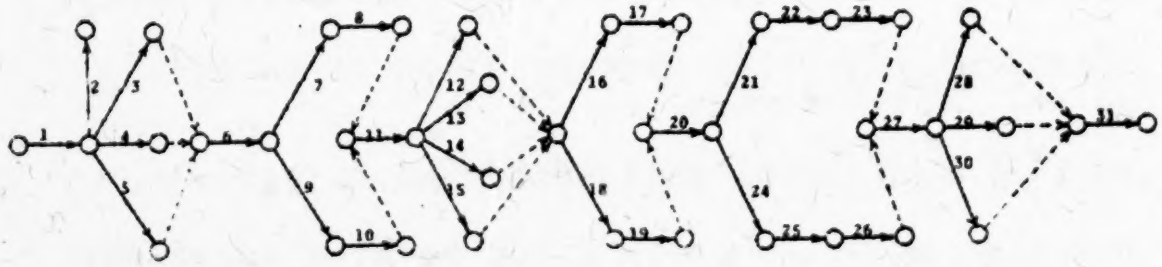
NETWORK FOR ESTABLISHING

A COLLEGE ADVISORY GROUP



NETWORK FOR THE DEVELOPMENT OF A

SELF-INSTRUCTIONAL LEARNING ACTIVITY PACKET



ACTIVITIES FOR THE DEVELOPMENT OF A SELF-INSTRUCTIONAL LEARNING ACTIVITY PACKET

1. Identify the specific curricular area in which the self-instructional learning activity packets are to be developed.
2. Define unit number one.
3. Define remaining units. Since there will be many units, the activities following number three will parallel those following activity number two.
4. Determine and assign title for the packet.
5. Determine the broad objectives of the packet.
6. Determine the desired content for the packet.
7. Identify the major concepts to be learned from the packet.
8. Identify the medial concepts to be learned from the packet.
9. Identify the medial concepts to be learned from the packet.
10. Identify the major concepts to be learned from the packet.
11. Identify specific behavioral objectives of the packet.
12. Determine the type of packet required for the instructional units.
13. Identify materials related to the instructional unit applicable for either teacher or pupil use.
14. Develop self-directed study guides with reference to multiple sources for resources with appropriate teacher helps.
15. Identify the appropriate teaching-learning approach.
16. Determine if the use of the deductive approach is desirable.

17. Identify concepts and skills and place them in both student and teacher packets.

18. Determine if the use of the inductive approach is appropriate.

19. Identify concepts and skills and place them in the teacher packet but NOT in the student packet.

20. Place behavioral objectives in the packets.

21. Identify teaching activities and place them in the teacher's packet.

22. Identify teaching resources and place them in the teacher's packet.

23. Determine the assessment measures for the evaluation of the student by the teacher, and place them in the teacher's packet.

24. Identify student activities and place them in the student packet.

25. Identify learning resources for the student and place them in the student packet.

26. Determine assessment measures for student self-evaluation and place them in the student's packet.

27. Identify provisions for individual differences and incorporate these in the packet.

28. Develop a multi-level approach for the packet if it is desired.

29. Develop and place quest activities in the packet.

30. Develop individual analysis and prescription for each student if desired.

31. Develop recycling activities and place them in the packet.

ACTIVITIES FOR DETERMINING THE EDUCATIONAL NEEDS OF THE LEBANON CITY COMMUNITY

1. Form an advisory committee made up of a small number of professional educators. The function of this group will be to set up the final working committee.

2. Identify the problem areas in detail and develop an initial set of objectives for the final working committee.

3. Search published material and educational research for information dealing with the educational needs of the youth and adults of a community.

4. Identify interested groups within the community who will have an interest in determining the educational needs of their community.

5. Identify interested people in both the school and community who are interested in determining the educational needs of their community.

6. Contact the community groups that have been identified.

7. Meet with the community groups and explain the problem areas. After interest has been generated ask for a member from the community organization to serve on the final committee.

8. Organize the final committee and discuss the problem. Be certain that the following areas are covered. The education needs of the public elementary and secondary school children, the parochial school population, and the adults within the community.

9. Use the available research on educational needs that was found in activity number 3.

10. Use the available literature on educational needs as found in activity number 3.

11. Discuss and assess the available research and literature on educational needs.

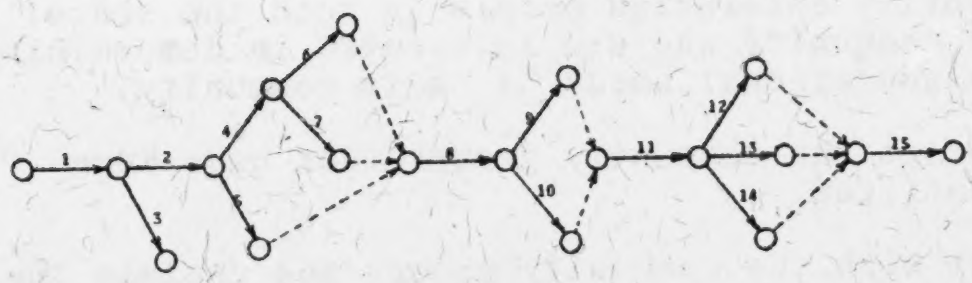
12. Determine a list of felt needs for the community of Lebanon City.

13. Compare the needs as presented in the research and literature with the needs established by the local committee.

14. Analyze the overall community of Lebanon City.

15. Formulate a list of educational needs for the Lebanon City community based on the literature and research data and the committee's inherent understanding of the community.

NETWORK FOR DETERMINING THE EDUCATIONAL NEEDS OF THE LEBANON CITY COMMUNITY



2. Develop networks for summer workshops.

   a. Superintendent's role in curriculum development.
   b. Operation and use of video-tape recorder.
   c. Training session for curriculum coordinators.
   d. New social studies pilot workshops.
   e. New language arts pilot workshops.
   f. Taba Social Studies workshop.
   g. Greater Cleveland Social Studies workshop.
   h. Individualizing instruction pilot workshop.
   i. Fenton Social Studies workshop.
   j. Nebraska Language Arts workshop.
   k. Minnesota Social Studies workshop.

3. Develop network for Wilkes-Barre program.

4. Modify networks as needed.

5. Develop Model Management System for SPEEDIER.

The first two networks in this section were developed before the modification of listing activities was developed. The network concerning the development of instructional objectives in behavioral terms shows the detailed development of a specific function. Even though this may not be necessary for all conference planners, it increased the efficiency of this function.

The last two networks relate to the activities leading up to the yearly United States Office of Education Evaluation. This was developed by the Executive Director and MMS manager. The modification of the network grew out of a full staff discussion of the diagram.

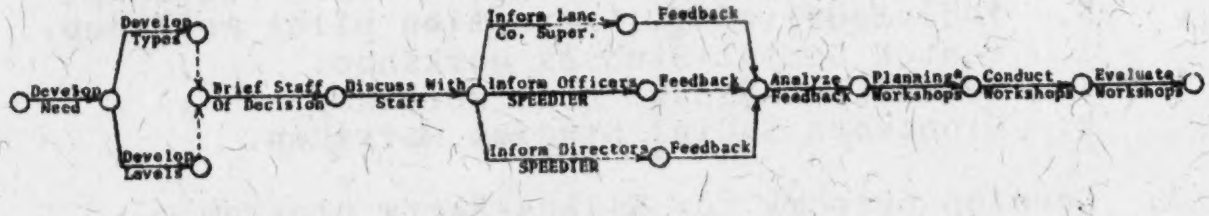
The completed Phase IV networks follow:

Completion of MMS

The completion of Phase IV is planned on or before June 30, 1970. The bulk of remaining work includes completion of additional networks covering some June and Summer workshops and the modification of existing networks. After this has been completed, the final organization of a MMS for SPEEDIER will be completed.

PHASE IV

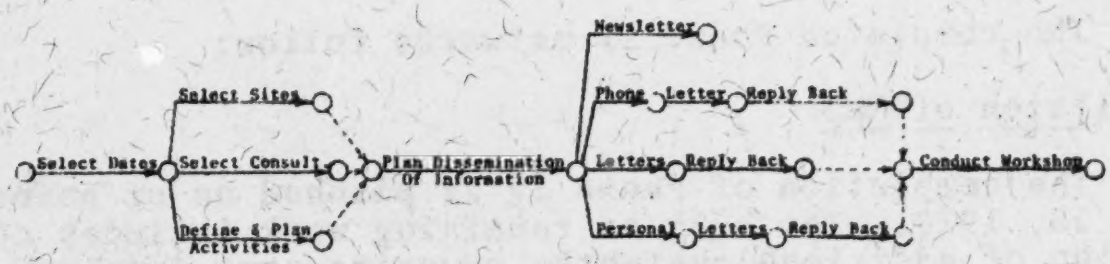
NETWORK FOR THE DEVELOPMENT AND OPERATION OF JUNE WORKSHOPS



*Detailed Network Available

PHASE IV

NETWORK FOR PLANNING JUNE WORKSHOPS



ACTIVITIES FOR LEARNING HOW TO WRITE INSTRUCTIONAL OBJECTIVES IN BEHAVIORAL TERMS

Section A -- Introduction

1. Develop within the teachers or school system the background and need for writing instructional objectives and behavioral terms.

2. Assess the knowledge the teachers already have concerning instructional objectives written in behavioral terms.

Section B -- Writing Instructional Objectives in Behavioral Terms

Any one of three methods can be used to teach teachers how to write Instructional Objectives in Behavioral Terms. These three begin with activity 3, 6, or 9. "Three" and "six" are totally self-instruction while "nine" involves planned group work.

3. Work through Mager's "Preparing Instructional Objectives." This is a programmed text designed for teachers and student-teachers to help them understand how to properly write instructional objectives in behavioral terms.

4. Have the teacher rewrite some of the objectives from a course that he now teaches and put them in behavioral terms. After this has been done have him compare his written instructional objectives with those prepared by other teachers.

5. Assess the objectives that have been written according to the three established criteria.

6. Have the teacher use the Vimcet materials. These materials contain film strips and booklets and are designed as a self instructional system in writing instructional objectives in behavioral terms.

7. Have the teacher rewrite some of the objectives from a course that he now teaches and put them in behavioral terms. After this has been done have him compare his written instructional objectives with those prepared by other teachers.

8. Assess the objectives that have been written according to the three established criteria.

9. Use specially developed packet titled "Skill Development in Writing Behavioral Objectives" developed by Mr. George M. Baer of the SPEEDIER Project.

10. Read the definitions for the various types of objectives.

11. Discuss the definition of behavioral objectives.

12. Have the group write their own definitions for instructional objectives that are written in behavioral terms.

13. Read "Writing Instructional Objectives" by Ebsensen.

14. Have the group assess their own understanding of instructional objectives that are written in behavioral terms.

15. Recycle to activity number 9 any teacher who is not satisfied with his understanding of instructional objectives.

16. Have the group discuss any problems they may have concerning their understanding of instructional objectives written in behavioral terms.

17. Recycle any teacher who is not satisfied at this point with his understanding of instructional objectives.

18. Introduce to the group the book written by Mager titled "Preparing Instructional Objectives" and the Vimcet materials.

19. Have the teacher rewrite some of the objectives from a course that he now teaches and put them in behavioral terms. After this has been done have him compare his written instructional objectives with those prepared by other teachers.

20. Assess the objectives that have been written according to the three established criteria.

21. Work through Mager's "Preparing Instructional Objectives." This is a programmed text designed for teachers and student-teachers to help them understand how to properly write instructional objectives in behavioral terms.

22. Have the teacher use the Vimcet materials. These materials contain film strips and booklets and are designed as a self instructional system in writing instructional objectives in behavioral terms.

Section C -- Developing Student Related Materials

23. Have the teacher develop a pre-assessment instrument for his students.

24. Have the teacher develop the needed activities that will be required to have his students reach the desired objectives.

25. Have the teacher develop an assessment instrument that can be used to measure whether or not his students have achieved the instructional objectives.

Section D -- Establishing the Theoretical Base for Levels of Objectives

26. Discuss Bloom's Taxonomy with the group.

27. Discuss the meaning of the cognitive domain with the group.

28. Discuss the various thought levels with the group.

29. Have the group establish the level of thought for the instructional objectives that they have written.

30. Write instructional objectives in behavioral terms so that they represent at least two or more levels of thought.

31. Develop activities for any new objectives that have been written.

32. Discuss the affective domain with the group.

33. Discuss Bloom's Taxonomy and levels of thought with the group.

Section E -- Assessment of the Ability to Write Instructional Objectives in Behavioral Terms and Their use in the Classroom

34. Have the group take a post assessment inventory to determine how well they know how to write instructional objectives in behavioral terms.

35. Have the group fill out an evaluation sheet covering the process by which they have worked through instructional objectives in behavioral terms

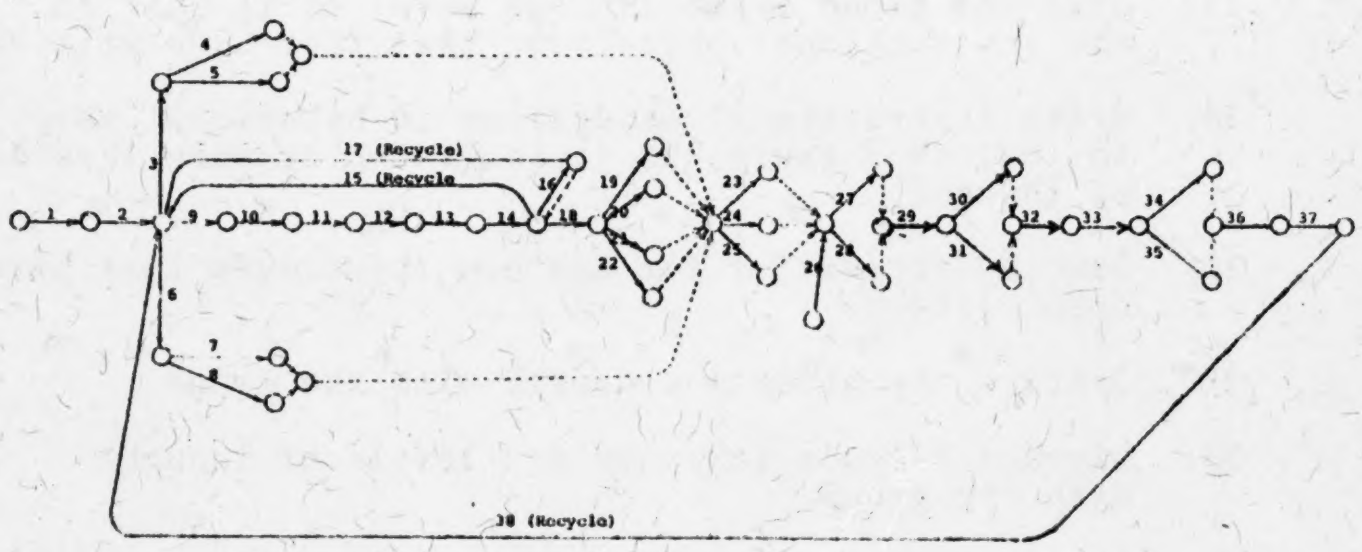
36. Use the instructional objectives that have been written in a classroom setting.

37. Assess the effectiveness in the use of instructional objectives written in behavioral terms in the classroom.

38. Based on the assessment obtained in number 37, recycle through those activities that are necessary to increase effectiveness in the use of instructional objectives by the teacher.

NETWORK FOR THE PREPARATION OF

INSTRUCTIONAL OBJECTIVES WRITTEN IN BEHAVIORAL TERMS



ACTIVITIES REQUIRED TO PREPARE FOR UNITED STATES OFFICE OF EDUCATION EVALUATION

Section A -- Administrative Details

1. Arrange with the Pennsylvania Department of Education for Evaluation Team and dates.
2. Make all physical arrangements for lodging and feeding of all Evaluation Team Members.
3. Inform the Directors of SPEEDIER about the evaluation.
4. Schedule visitations for Evaluation Team Members.
5. Arrange for specific visits with members of the SPEEDIER Board of Directors.
6. Determine staff commitments relating to the evaluation.

Section B -- Development of Report Booklet

7. Develop written format for the booklet.
8. Determine specific staff tasks assignments.
9. Schedule secretary time.
10. Rewrite terminal reports of SPEEDIER staff members who have terminated their employment.
11. Answer questions posed in the evaluation format.
12. Arrange for the collation of the appendix.
13. Write assigned reports.
14. Plan and record activities through June, 1970.
15. Review last year's evaluation report and compare positive and negative comments with this year's operation.
16. Design cover for evaluation booklet.
17. Schedule printer.
18. Proof read materials for booklet.

19. Collate booklet.

20. Take booklet to printers.

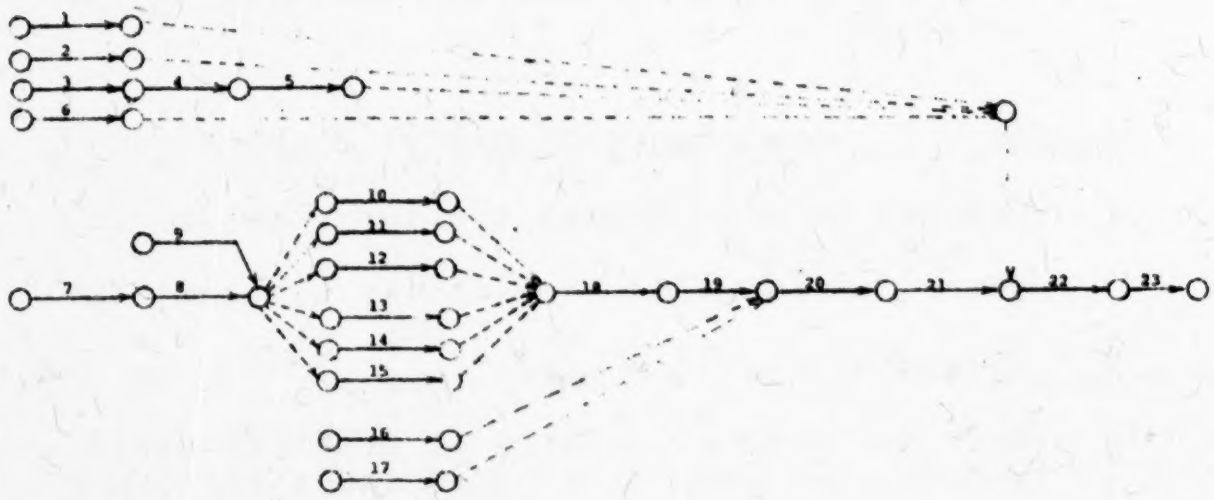
21. Mail copies of the evaluation report to R.B.S., U.S.O.E., Evaluators, and Pennsylvania Department of Education.

Section C -- The Evaluation

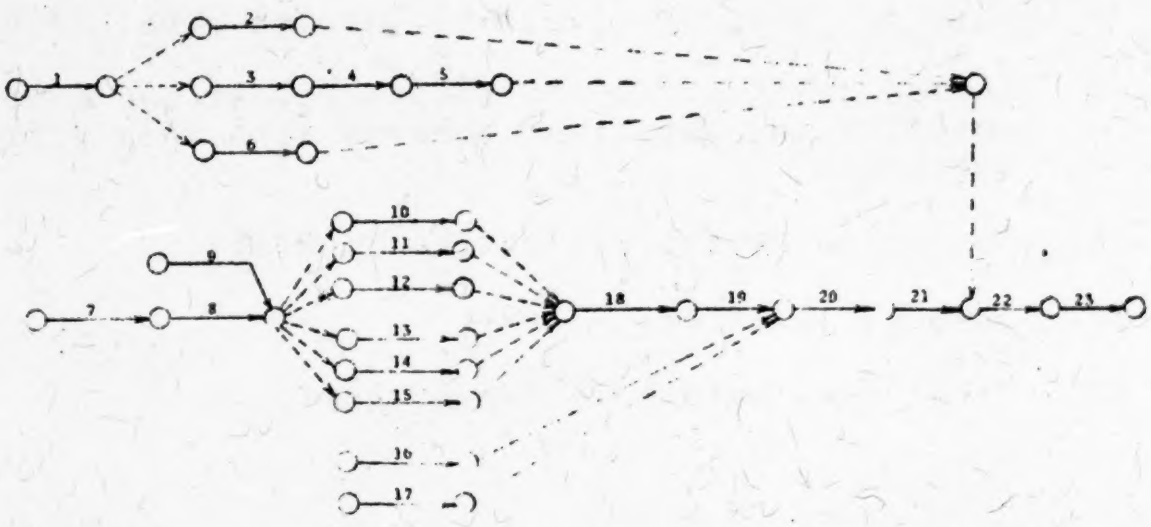
22. Active evaluation on site.

23. Mail evaluation reports to SPEEDIER Directors in the four counties, R.B.S., and other interested parties.

NETWORK SHOWING THE PREPARATION FOR THE USOE EVALUATION



MODIFIED NETWORK SHOWING THE PREPARATION FOR THE USOE EVALUATION



The present plan includes the development of a chart based on a time continuum. The functions of SPEEDIER will be placed on this chart showing appropriate start and completion times. Many of these items will have detailed networks available along with listings of related activities. The entire MMS will be detailed with a narrative to bring the visual items into proper prospective.

It is hoped that the model thus developed might be used in other areas of the country to establish centers to introduce and implement the change concept in education.

Section K

College Advisory Committee

COLLEGE ADVISORY COMMITTEE

Because of the pressures of involvement on much larger scale with implementation of language arts and social science programs, it was finally decided that SPEEDIER could no longer coordinate activities for the College Advisory Committee. The decision was made reluctantly.

As the committee adjourned its monthly meeting in May, some hope for increased coordination appeared to be possible between and within educational institutions in the four-county area. The time invested was well spent, however, and is reflected in the number of student teachers working with SPEEDIER-implemented programs. This was the hope of the committee.

The colleges and universities represented on the committee included Franklin and Marshall, Millersville State College, Elizabethtown College, Lebanon Valley College, Harrisburg Area Community College, York College, and Capitol Campus of Penn State University, and Hershey Medical Center, Penn State University.

Attached is a letter sent to the participating institutions.

PEEDIER PROJECT
research
planning
implementation
101 WEST CHERRY STREET
PALMYRA, PENNSYLVANIA 17078
PHONE 717 838-9611

December 18, 1969

Dear

Because of our increased involvement with elementary and secondary schools, we find it impossible to reactivate the College Advisory Committee. It is with great reluctance that this decision has been made. We appreciate your co-operation and sincere participation during the past year.

We have hopes that our Project can be extended and that it will be possible in the future to continue the work that was started.

If you feel that the work of the Committee should be continued, we hope you will take the initiative by contacting the other members. We would be happy to serve on the committee, but find it impossible at this time to coordinate its activities.

Sincerely yours,

Edward A. Teichert, Jr.
Language Arts Specialist

Charles B. Myers
Social Science Specialist

blp
Enclosure

COLLEGE ADVISORY BOARD MEMBERS

Mr. Charles Hostetler
Director, Secondary Education
Elizabethtown College
Elizabethtown, Penna. 17022

Dr. Carl Schmidtke
Secondary Education
Millersville State College
Millersville, Penna. 17551

Dr. Van Baker
English Department
York College
York, Penna. 17405

Dr. Evan Pattishall
Behavioral Science
M. S. Hershey Medical Center
Hershey, Penna. 17033

Dr. Harry Weast
Director of Visual Aids
Lebanon Valley College
Annville, Penna. 17003

Dr. Herbert Eisenstein
Penna. State University
Capitol Campus
Middletown, Penna. 17057

Mr. Richard Jordan
Communication & the Arts
HACC
3300 Cameron Street Road
Harrisburg, Penna. 17110

Mr. John Tinsley
Social Science Division
HACC
3300 Cameron Street Road
Harrisburg, Penna. 17110

Dr. Lewis Athey
Department of Economics
Franklin & Marshall College
Lancaster, Penna. 17603

Dr. Robert E. Ziegler
Assistant Dean of Faculty
Elizabethtown College
Elizabethtown, Penna. 17022

Dr. Cloyd H. Ebersole
Department of Education
Lebanon Valley College
Annville, Penna. 17003

Section L

Publications Report

PUBLICATIONS REPORT

Since earlier booklets proved to be worded too technically, a need was found for a booklet clearly defining SPEEDIER's activities for the layman. The resulting publication (attached) was mailed in November to school board members, chief school administrators, elementary and secondary supervisors, elementary and secondary principals, head teachers, city and county officials, Senators and Representatives, newspaper editors, PTA presidents, and the League of Women Voters -- all in the four-county area, and to other interested individuals outside the four-county area.

The monthly newsletter, IDEAS, is being produced and distributed as described in last year's report. The October 1969 issue included an insert breaking down by schools, grade levels, and number of teachers the pilot programs currently being conducted. The December 1969 issue included greater depth of detail in its features, and the mailing was increased to include every member of every school board in the four counties. The December modifications were conceived of as a part of the information campaign to meet the exigencies of Title III funding withdrawal. Samples are attached.

News releases continue to be produced and distributed as described in last year's report, with the addition of several local newspapers to the mailing list. As of December 1969, the papers seem most interested in items detailing school board agreements with SPEEDIER for 1970. The Lebanon Daily News might be cited as one that is committed to more subjective presentations of the Project's activities (example attached). Coverage this year has been sufficiently wide-spread to dictate a trial subscription to a clipping service (Mid-Atlantic News Service in Harrisburg, covering all Pennsylvania newspapers -- for December 1969 and January 1970).

A feature article describing SPEEDIER has been submitted to the monthly PSEA newsletter, VOICE. An article on SPEEDIER's role in realizing innovative goals for education will be submitted to the PSEA Journal by the end of the year.

The purchase of the Yashica reflex camera contributed significantly to dissemination procedures, from providing halftones for newspapers, to buoying SPEEDIER publications with closely related illustrative material.

Information is continually disseminated by SPEEDIER staff members invited to professional and public meetings. For example, a social studies implementor addressed a meeting of Berks County elementary principals interested in adopting interdisciplinary social studies in their schools. Language arts implementors met with a group of interested parents to explain the Nebraska curriculum being used by their children. A teacher training specialist conducted a workshop in Falls Church, Virginia, on interaction analysis. These are examples of how SPEEDIER's services to the community also serve as public information outlets.

SPEEDIER consistently serves an an originator of and clearing house for information that is eminently usable for members of the educational community. One example attached is a Computation of Reading Levels of Selected School Text Books, prepared by the Project staff for participants in language arts pilot programs. Another example (attached) is a description of Individually Guided Education in the Multiunit Elementary School, retrieved from the University of Wisconsin and reproduced for distribution to interested parties.

Up-dating the R.B.S. Booklet entailed locating the applicable Project's reports and ideas which have gone into operation or has been written since the original booklet was compiled.

The Pace Report and Eric Files as compiled in "Research in Education" have given ample coverage to the topics being sought. Personal contact provided information for further contacts last year, but when these are followed up many produced no reply or the information that the Project was not what we thought it was. The format of the Booklet has remained similar with the addition of an index using Eric Descriptors.

Scheduled for completion in January 1970 is a series of booklets detailing the language arts, social studies, and teacher training programs. Each will be a concise explanation written in lay terms, augmented

by illustrations of the programs in progress. Currently in production is a publication for language arts teachers that serves as a reservoir of ideas for introducing or reinforcing single language arts units. Germinal ideas were submitted by teachers in Nebraska pilots and culled from observations. When this booklet's degree of success becomes calculable, other similar publications may be suggested.

Section M

Audio-Visual Report

AUDIO-VISUAL REPORT

SPEEDIER audio-visual equipment has earned its keep well over the past year.

Equipment includes:

2 - Panasonic video tape recorders
2 - small Panasonic T.V. monitors
1 - large Motorola T.V. monitor
1 - Panasonic T.V. camera
1 - G.B.C. view finder monitor
1 - large zoom lense
2 - small lenses
1 - carousal projector
1 - overhead projector
2 - regulation tape recorders
1 - phonograph

Microphones:

2 - shotgun microphones
1 - small Panasonic microphone
2 - small microphones

Cameras:

1 - Yashica 2 1/4" reflex camera

The most frequently used items are the two complete video tape sets, each of which includes video tape recorder, T.V. monitor and Panasonic T.V. camera. These sets are used most often in the micro-teaching session, where a teacher is recorded teaching a short lesson to a small group of six or seven students. However, this is not its only purpose, as we have found many wide-range uses for the video tape sets: in taping actual classroom situations, in teacher workshops, to give demonstration films, in self-assessment and staff analysis, and our own home movies - because we can't be in two places at once.

New purchases in the audio-visual department include a 2 1/4" Yashica reflex camera, used most frequently for stills to accompany information publications and press releases. An Electro-voice shotgun microphone is among new accessions. We were so well pleased with our original shotgun mike and found one was not sufficient for our purposes. Included here is a third (13") Panasonic T.V. monitor, which has proved very successful.

Originally SPEEDIER was working with Ampex video tape equipment; however, in August, 1969, a transfer was made from Ampex to Panasonic. We found the Ampex equipment needed frequent repairs; it could not do the dubbing of the Panasonic; and the Ampex was simply too heavy and cumbersome. The Panasonic equipment has worked out most satisfactorily and no repairs have been necessary since August.

Section N

Summer Workshops Independent of Pilot Programs

SUMMER WORKSHOPS INDEPENDENT OF PILOT PROGRAMS

Background and Rationale

The purpose of this series of workshops was to involve educators in sessions centered around curriculum- and teacher-change. The intent was to expose them to new ideas in their field and to interaction with other persons in positions similar to theirs. The general plan suggested that the workshop experience not demand follow-up activities for the participants. However, the experience could stimulate interest in other SPEEDIER activities and would tend to broaden the kinds of involvement open to persons in the four counties.

Workshops Offered in the Series

"Developing Behavioral Objectives in Elementary Social Studies"

Elementary Teachers — June 16-19
No. of participants - 7

Elementary Teachers — June 23-26
Canceled due to lack of participants.

"An Introduction to Self-Awareness Programs"

Elementary Administrators — June 16-19
Canceled due to lack of participants.

Secondary Administrators — June 23-26
Canceled due to lack of participants.

"New Language Arts Programs in Reading for the Elementary School"

Elementary Teachers — June 16-19
No. of participants - 26

"Evaluating Elementary Language Arts Curriculum"

Elementary Teachers — June 16-19
No. of participants - 10

"New Curriculum Trends and Implications for the School Library"

Elementary Librarians — June 16-17
No. of participants - 10

Secondary Librarians — June 23-24
No. of participants - 10

Secondary Librarians — June 25-26
No. of participants - 7

"Evaluating Elementary Language Arts Curriculum"

Elementary Administrators — June 23-26
Canceled due to lack of participants.

"Changing Language Arts Programs in the Secondary School"

Department Chairmen — June 23-26
No. of participants - 8

"Understanding New Social Studies Programs"

Elementary Teachers — June 23-26
No. of participants - 12

"Superintendent's Role in Curriculum Development"

Chief School Administrators — July 27-30
Canceled due to lack of participants.

"A Training Session for Curriculum Coordination"

Persons Involved in Curriculum — August 11-14 and 18-21
Canceled due to lack of participants.

Evaluation of Individual Workshops and the Series as a Whole

Each workshop was considered most successful by those attending. The workshops, however, would have had more impact if the series had been more appropriately planned with regard to time, place and recruiting of participants.

Long-Range Expanded Effects of the Workshops

Although not formally devised, many key contacts between SPEEDIER and area districts resulted from the workshops.

Examples of results of the contacts follow:

A. Consultant services for district-wide and departmental in-service sessions.

B. Use of SPEEDIER's resource library.

C. Adoption of pilot programs.

D. Individual consultant services

E. Increased participation in other SPEEDIER workshops.

F. Consultant services for college classes.

Section O

Consultant Services

CONSULTANT SERVICES

Language Arts

In an effort to be knowledgeable in current language arts developments, literature is read, personal contacts are made with leaders of innovative programs, visits are made to districts with promising programs. Alternatives have been provided to schools in the area with descriptions of innovative programs such as L.A.P.'s, the APEX Program, the Wisconsin Program, and other Project English programs.

Recently the executive director and language arts specialist visited Manitowac, Wisconsin, to observe the use of Wisconsin materials and Trenton, Michigan, to observe the operation of the APEX Phased Elective Program. The latter appears to be an appropriate follow-up for schools now using the Nebraska Plan, or for schools who wish to take the step from a traditional approach to an elective, non-graded approach.

Materials such as the University of Georgia K-6 teacher resource materials are valuable for elementary teachers. Other approaches have been identified and related to schools seeking a new program or supplemental materials.

A broad range of consultant services is offered to institutions with varied requests. Some want to know only about the Nebraska Curriculum; others seek aid in identifying meaningful published programs. Others request help in improved methods of functioning as a horizontal or vertical committee. There are requests by social groups for information about new educational directions.

Some idea of the scope of consultant services is evidenced in the following selected activities. In some instances the activity described will be one of many similar ones; others will describe unique services which have occurred only once.

At Franklin Elementary School in York, three members of the task force presented a program to two hundred P.T.A. members. The presentation included a description of the Nebraska Program and a demonstration of micro-teaching.

Discussion of the Nebraska Program and other innovative language arts programs occurred at Capitol Campus and Lock Haven for undergraduate and graduate students.

A presentation was made at State College as part of the Pennsylvania Council of Teachers of English Annual Meeting.

Meetings have been held with English departments to discuss the development of humanities programs.

During the summer the language arts specialist worked with summer in-service groups to develop directions and techniques for curriculum revision and change. This occurred at Eastern Lebanon High School and Darby-Colwyn. An additional two days have been scheduled for Darby-Colwyn.

Frequent sessions have been conducted for English departments exploring possible future change. Conestoga Valley and Hempfield are two such instances.

Members of the task force have appeared at frequent in-service programs scheduled by participating districts, meeting with vertical groups and secondary departments.

Replies are made to requests, within and outside the state, for information about the Nebraska Program and identification of other innovative programs.

With the increased activities of the organization, members of the task force have learned to conduct sessions on instructional objectives and a general report of the operation of a project such as SPEEDIER. In short, as the requests increase and the nature of the requests change, task force members develop the skills to meet such requests for consultant services.

Social Studies

Visits to projects developing new social studies programs, affiliation with and direct participation within state and national organizations, and conferences with editors and consultants of publishing firms characterize the efforts to gain knowledge used frequently in consultant services.

The social studies specialist has visited during the past year such projects as the Lincoln-Filene Social Studies Project at Medford, Massachusetts; the E.D.C. Social Studies Project at Cambridge, Massachusetts; the Chelmsford Social Studies Program at Chelmsford, Massachusetts; Taba Training Session at the University of Colorado; and the Allegheny County World Cultures Project.

Affiliated and/or direct participation occurred at the annual meeting of the ASCD; several conferences of the Pennsylvania Council for the Social Studies, including one session of the executive board; the annual conference of the National Council for the Social Studies; and a semi-annual meeting of the Southern Pennsylvania Council for the Social Studies.

The social studies specialist also met with representatives of book publishers and program developers to discuss current social studies programs and future trends. Selected examples of such meetings include Holt, Rinehart and Winston; Scott-Foresman; Computer Applications, Inc.; and Addison-Wesley.

Visitors from outside the four-county area came from the P.D.E.; Tarrytown, New York; Wilkes-Barre; Allentown; and Upper Merion.

Conducting in-service programs, speaking to college classes, and working with large and small groups in elementary and secondary schools form the major portion of consultant services offered. In most instances, the services centered on new social studies programs and curriculum revision. In-service sessions were conducted at Palmyra, Donegal, Hempfield, Elizabethtown, and York. Meetings were held with departmental groups at Eastern, Manheim Central, Donegal, Lower Dauphin, ELCO, Milton Hershey, Lititz, Susquehanna, and Manheim Township.

Sessions with college classes occurred at Lebanon Valley, Penn State Capitol Campus, and Lock Haven. Meetings were conducted for administrators at Annville-Cleona, Dauphin County Principals Association, and Lower Dauphin.

Behavioral Scientist

Most consultant-type service has been incorporated in the in-service training of Nebraska Language Arts pilot teachers. These full-day programs have included an introduction to the analysis of classroom verbal behavior and the technique of micro-teaching. Emphasis has been placed on awareness of teaching patterns rather than evaluation.

Teachers have had the opportunity to practice and discuss interaction analysis skills together. The use of this method joined with micro-teaching has been presented as a possible introduction to self-assessment.

This program has been also presented as an independent in-service day workshop separate from the Nebraska Curriculum. Schools within or out of the four-county service area have been involved.

Executive Director

Consultant meetings on SPEEDIER operations have been held with school boards, school administrative staffs, P.T.A. groups, total faculty groups, selected curriculum leaders, Chamber of Commerce representatives, other Title III centers, College of Education departments at Millersville, University of Michigan, and Temple University.

Section P

General Information for 1970 Report

General Information

1. **USOE Number** OEG-3-7-703596-4396 **DPI Code Number** 014

2. **Project Title** SPEEDIER: Study for the Purpose of Expediting Educational Developments Indicated Through Educational Research

3. **Administrator of Grant**

   Name Harry K. Gerlach **Title** County Superintendent

   Address Lancaster County Board of School Directors, 1383 Arcadia Road, Lancaster, Pennsylvania **Zip Code** 17601

   Telephone Number (717) 394-0707
   Area

4. **Agency Awarded Grant**

   Local Education Agency Lancaster County School Board

   District/County Code Area 0

5. **Project Director**

   Name Dr. Thomas S. Hamill

   Address SPEEDIER Project, 101 W. Cherry Street

   Palmyra, Pennsylvania **Zip Code** 17078

   Telephone Number (717) 838-9611
   Area

6. **Type of Project**

   ☐ Initial Grant ☒ Continuation of Grant

7. **Fiscal Data (Complete where applicable)**

	Initial Application	First Continuation	Second Continuation
Amount requested	$103,530.00	$200,000.00	$300,000.00
Amount granted	93,403.00	192,460.57	200,000.00
Amount expended	73,063.43	192,460.57	200,000.00
Amount returned to USOE	20,339.57	-0-	-0-

8. **Personnel (Complete as applicable)**

	Initial Application	Continuation	Continuation
Number requested			
Professional	5	11	10
Secretarial	1 1/2	4	5
Number hired			
Professional	5	11	10
Secretarial	1 1/2	4	5

SELF-EVALUATION

9. Program Objectives

a. List the program objectives as stated in the original proposal.

a-1. To become acquainted with and to study in depth the latest educational research and practices.

a-2. To relate the results of research and newly developed educational practices to the programs of the schools and other educational agencies in Region O.

a-3. To cooperate with and to help to implement research designs and projects developed nationally, particularly in the tri-state area as proposed by Research for Better Schools, Inc., a plan proposed under Title IV of P.L. 89-10.

a-4. To study and to develop regionally, educational practices which are based on findings of the most recent educational research.

a-5. To help to disseminate the findings and any newly developed curriculum practices studied and/or developed by the regional council.

a-6. To help local schools and educational agencies to implement newly developed programs through such means as workshops, consultant services, development of curriculum materials, development of curriculum guides, the organization of exemplary demonstration class situations, etc.

a-7 To develop a comprehensive, balanced and sequential curriculum program K-12, selecting areas of concern as designated by an Executive Board.

The seven program objectives as listed are the objectives as approved in the proposal submitted in 1967. During the evaluation session of 1968 it was agreed that the program objectives would be modified to state:

(1.) To bring educational research development in the fields of language arts, social sciences, group dynamics, fine arts, and behavioral science into focus for the benefit of the four counties.

(2.) To utilize all of the research developments indicated in number one to bring about changed behavior on the part of the teacher for improved learning on the part of the student.

(3.) To utilize all of the research developments indicated in number one to bring improved materials to use by the classroom teacher where it can be anticipated improved learning will take place.

(4.) To make available evaluated listings of all methods and materials currently available in the field of language arts and social sciences.

(5.) To assist teachers of language arts and social sciences with the implementation of changed methods and materials.

(6.) To assist teachers in understanding the newer concepts of language arts and social sciences.

(7.) To develop an individualized approach for working with the classroom teacher that research indicates will bring about significant improvement in the teacher-learner relationship.

b. Explain the progress made to date toward achieving each objective as listed above:

Each progress report is written in terms of the second set of objectives; however, they may be readily applied to the original objectives recognizing implementation of Language Arts, Social Science, Group Dynamics and Behavioral Science in lieu of the total curriculum structure. Progress toward achieving these goals is listed below in terms of activities. The degree of success in reaching these objectives is described in specific reports.

b-1. Continued progress has been made toward bringing into focus newer educational research developments in language arts, social science, group dynamics and behavioral science for the four counties. The cut in federal funds, however, forced us to concentrate on other objectives in lieu of objective number one. We were able to accomplish a number of things. The most significant development for establishing this focus is the continual analysis and review of our research for the six pilot programs and the dissemination of such information through reports to the four counties. Reports of our analysis have been disseminated through extensive numbers of workshops, the revised booklet on innovations in language arts, social science, and teacher behavior; the future school conferences; work on learning activity packets; the publication of IDEAS and the number of special workshops which have been developed for departments or entire school districts.

b-2. Outstanding progress has been made in meeting the second objective through the expansion of the social science projects, the Nebraska language arts project, the model management systems project, and more traditional types of in-service educational programs. Pilots were expanded into total schools and the results have been most encouraging. Future plans call for involvement of total school districts, the generation of district projects, and the training of local leaders.

b-3. Objective three has been met to a great degree by the implementation of the social science projects, Nebraska language arts, and the learning activity packet projects. The most significant progress for this objective was made this year when instead of twenty to twenty-five teachers being involved in particular pilot programs, the number of teachers was expanded into hundreds working with the SPEEDIER Project for change in the four counties. Next year should bring even greater changes as the final stages of institutionalization are approached.

b-4. Objective four has been met in two ways.. First, reading levels of books placed in the library were computed and made available for the area. Copies of this report were mailed to all districts. Second, the supplement booklet on innovative materials in language arts, social sciences, and behavioral science was compiled, published, and distributed. There is still much work to be done; however, little emphasis was placed on this objective during the 1969-1970 school year due to the cut in federal funding.

b-5. Objective five was met most significantly by the pilot projects (Social Science, Nebraska Language Arts, Learning Activity Packets) where staff members worked directly with classroom teachers to implement change with methods and materials. Other procedures which worked toward realizing this objective were workshops developed by the staff for classroom teachers.

b-6. Objective six was met specifically within the pilot projects and an extensive number of workshops. Information gained through these activities enabled language arts and social science teachers to become aware of and to understand newer concepts in their fields.

b-7. Objective seven has yielded the most rewarding developments in the SPEEDIER Project during 1969-1970. Micro-teaching with teachers participating in the Nebraska program has been extremely meaningful for the teachers. Audio-taping and two different kinds of analysis are used with every social studies teacher

10. Involvement of cultural agencies and non-public educational agencies (cite specific examples) since the beginning of your project. DO NOT list those involvements from your original proposal if they did not occur. Briefly list the agency and kinds of involvement and/or cooperation.

I. Area Colleges

A. Elizabethtown College

Consultant Services
Part-time staff members or SPEEDIER staff
Exchange use of library facilities
Workshop involvement
Reading Conference
Member of College Advisory Group
Resource Instruction

B. Lebanon Valley College

Consultant Services
SPEEDIER supplied pre-service training for student teachers
Visitation to SPEEDIER pilots
Resource instruction by SPEEDIER staff
Exchange use of library facilities
Workshop involvement
Reading conference
Member of College Advisory Board
Visiting lectures to methods classes

C. Franklin and Marshall College

Top administrators of the college provided support during early stages of SPEEDIER
Workshop involvement
Reading Conference
Member of College Advisory Board

D. Millersville State College

In-service program for elementary student teachers
Exchange of consultant services
Information-linking workshop
Exchange use of library facilities
Coordinated development of library survey
Resource instruction by SPEEDIER staff
Arranged for visitations to various projects and SPEEDIER pilots
SPEEDIER use of their film library
Reading conference
Workshop involvement
Member of College Advisory Board

E. Capitol Campus, Pennsylvania State University

Consultant Services
Use of library facilities
Exchange of consultant services
Member of College Advisory Board
Resource instruction

F. M.S. Hershey Medical Center,
Pennsylvania State University

Member of College Advisory Board

G. Harrisburg Area Community College

Workshop involvement
Member of College Advisory Board

H. York College

Consultant Services
Workshop involvement
Member of College Advisory Board

II. Other Colleges

Lock Haven
Messiah
Shippensburg
Penn State
York Campus - Penn State
Clarion State
University of Albert

Consultant Services

III. Channel 33, Educational Television

Provided SPEEDIER with technical assistance
Interchange of research
SPEEDIER disseminated pertinent program listings in IDEAS.

IV. Lancaster County Day School

Conference involvement

V. Area Catholic Schools

Catholic schools are involved as regular participating districts in all SPEEDIER activities

VI. Pennsylvania Department of Education

MAAP Project
ISIS Project
Title III consultant services
SPEEDIER use of P.D.E. research center
Quality Assessment (see report)
Exchange of consultants for workshops
Human relations activities
State social studies seminar

VII. Research for Better Schools

Consultant Services
R.I.T.E. concept
Project Management
Exchange of research and library facilities
Use of consultants at conferences
SPEEDIER's use of R.B.S. materials
Booklet of innovative practices

VIII. S.P.A.R.C. (Title III, West Chester)

Exchange of information
Cooperative efforts -- Nebraska Curriculum

IX. Title IV, Erie

Supplied SPEEDIER with social studies bibliography and analysis
Disseminated information about SPEEDIER
Consultant services

X. R.I.S.E. (Title III, Delaware-Bucks Counties)

Provided SPEEDIER with research information
Provided consultants in language arts and social sciences
Use of library facilities

XI. D.A.R.T. (Delaware)

Exchange of information
Exchange of consultants

XII. Far West Laboratory

Source of information

XIII. U.S.D.C. Center

Exchange of information
Provided consultants

XIV. P.S.E.A.

Opened contacts for SPEEDIER with N.E.A.
Contact established for dissemination of information

XV. N.C.T.E.

Conference attendance
Source of information

XVI. N.C.S.S.

Exchange of information
Conference leadership
Curriculum committee member

XVII. P.C.S.S.

Taking part in annual P.C.S.S. conference
Supplied them with research information
Conference leadership

XVIII. Middle States Council for the Social Studies

SPEEDIER provided them information

XIX. Foreign Policy Association

Supplied SPEEDIER with international education information and materials
SPEEDIER is testing center for their new materials
SPEEDIER supplies them with consultant services
F.P.A. consultants used in SPEEDIER conferences

XX. Milton Hershey School

Conference attendance
SPEEDIER provided them consultant services
Involvement as regular participating school district

XXI. Miscellaneous

In addition to the preceding involvement, SPEEDIER has cooperated with innumerable organizations in a variety of ways. Included are such organizations and institutions as follows:

ERC, Cleveland; Carnegie-Mellon University; University of Pittsburgh; University of Pennsylvania; Nebraska University; San Francisco State University; University of Minnesota; and University of Colorado Curriculum Centers; U.C.L.A.

SPEEDIER has worked with many public and non-public institutions outside the four-county area including Berks County; Darby-Colwyn; Tarrytown, New York; and Wilkes-Barre.

11. Evaluation Activities Completed

a. Sumarize the progress of project to date.

Objective

The SPEEDIER Project has completed a research report on the Social Studies Pilots statistically assessing change scores on a number of instruments used with students and teachers. Section C of this report contains this document. The results of this research report have been used in planning in-service programs for teachers.

Results of the research report coupled with comments available on workshop evaluation sheets have caused some changes in conference format and anticipated changes in conference content. The interpretations of all workshop evaluation sheets are available in the appendix to this report. These sheets indicate that all SPEEDIER-sponsored workshops have been of a positive nature and have been well received by the participants. Another factor showing positive conference results is the increased number of requests for SPEEDIER-conducted programs both within and from outside the four-county area.

Pilot teachers in both social studies and language arts were asked to complete questionnaires concerning their impressions of the programs and suggestions for ways that SPEEDIER involvement could be improved. The overwhelming response to all programs has been positive and suggestions made for SPEEDIER have been incorporated since the beginning of the present school year.

Further evidence of successful involvement with local school districts is provided by the increased involvement in the number of teachers and school districts.

Subjective

SPEEDIER has been provided on numerous occasions of positive oral feedback concerning Project-sponsored activities. Many requests for increased services have been caused by this feedback. The number of requests for information have been growing in the past year. It is suggested that the increased dissemination activities have in part been responsible for these requests.

b. Summarize the internal evaluation results to date.

Objective

The use of project management techniques, PERT/CPM, has increased the ability of the SPEEDIER staff members to assess their planning techniques. The development of a SPEEDIER Model Management System has given each staff member a tool to use for assessing his effectiveness in planning and following that plan.

The development of the Social Studies, Language Arts, and Research Report has caused the staff members to reflect on the effectiveness of the programs and make positive suggestions for modification in these areas. A meeting with the principals of the schools using the Nebraska Curriculum led to many suggested changes in the organization for the implementation of the pilot program. Based on these suggestions, modifications are planned for the in-service training of both teachers and principals.

SPEEDIER staff members have used video-tape equipment to view themselves while analyzing the micro-teaching sessions. Major revisions for staff involvement are now underway based on objectives viewing of these tapes.

Subjective

Small group meetings have proven to be the best means available for internal assessment and evaluation. Periodically staff members involved in various phases of the SPEEDIER operation meet to discuss the progress and plan future events. These meetings have resulted in modifications of operation and the increased awareness of the necessity for staff in-put activities. With the expansion of our programs, more staff members will have to perform dual functions.

This realization has led to staff training sessions that are informally carried on and are now being planned to increase the competencies of all staff members. This training will increase and broaden the operating capacity of the SPEEDIER Project.

12. Dissemination Activities Completed

See Section L of this report.

13. SPEEDIER Strengths

Based upon the operation to date, SPEEDIER strengths include the following:

Staff

1. Broad background of training and experience in individuals.
2. Efficient procedures in following guidelines of Title III responsibilities.
3. Ability to work with various school district personnel in establishing immediate and long-range relationships.
4. Awareness of needs of local school districts.
5. Accessibility to administrators and teachers in the four-county area.
6. Direct access to teachers and students for curriculum work.
7. Awareness of the "change role" and "linking agent" concepts and skill in performing these roles.
8. Acceptance of opportunities for widely diversified curriculum involvement.
9. Ability to work not only in an area of speciality, but also in related areas.
10. Compatibility of staff members.
11. Ability to inspire and convince educators of the potential value of curriculum change.
12. Diversified skills of total staff.
13. Dedication to the organizational objectives.
14. Ability to identify relevant specific objectives and methods for attaining and assessing them.
15. Knowledge of other supportive agencies in the four-county area.
16. Knowledge of the origin, development, and relationships of the SPEEDIER Project.
17. Significant development of skills through organizational experiences.
18. Substantial gain of individual expertise in diverse organizational functions.
19. Knowledge of an effective model for producing educational change.

14. It became evident in 1969 that many of the problems of 1968 were clearly resolved. Several new problems developed, however, that affected SPEEDIER's accomplishments. Viewed by the project director, SPEEDIER's special problems are cited below.

A. Financing

Title III in Pennsylvania made an across the board cut of 40%. This necessitated

1. the cutting of one of our major components.
2. the elimination of two full-time staff positions.
3. the seeking of a new position by another staff member.
4. the establishing of a charge for SPEEDIER's services, thereby eliminating some schools' involvement.
5. the limitation of 1969 activities to present pilots.
6. the curtailing of other activities.
7. the elimination of college advisory liaisons.
8. the elimination of three part-time positions.
9. the elimination of pilot assessment tests and research.
10. the constriction of rented space in the physical plant.
11. increased responsibilities placed on existing staff, and consequently limiting research.

B. Recruitment

During 1969 four staff members resigned from the SPEEDIER organization.

1. The first because of the cut in finances as mentioned above terminated the position.
2. The second because of insecurity inherent in funds being cut, etc.
3. The third to be married and relocate out of Pennsylvania.
4. The fourth worked for one month and received a better offer from his former association and returned.

Turnover in these positions necessitated recruitment of individuals to join an organization that probably only had one year to exist. Inspite of these circumstances, the project needed talented replacements who could understand and acquire skills to perform tasks developed by others.

C. Geographic Area

The large geographical area SPEEDIER serves presents problems with travel time. Some trips could be 120 miles.

D. Film and Library Facilities

Existing film and library facilities in the four-county area are not sufficient to provide needed materials for innovative programs. In some instances, this fact has hindered the success of pilot programs or other innovative practices.

E. Three-Year Funding

Short-range expediencies sometimes take precedence over long-range objectives because of the limitations in funding. Fiscal matters have come to bear significantly on organizational security in some quarters. In many cases, there is insufficient time for participating districts to become self-supporting in pilot programs.

F. Training

The success of the project hinges upon its ability to cope with two continuing training problems: the orientation and development of skills for new staff members, and the consistent amplifying of expertise among existing staff.

G. Internal Communications

During the past year this problem has been manifested when line of command was not always clear, and on occasions when the staff was unable to utilize needed resources and expertise possessed by other staff members.

15. List of Project Related Personnel

Cite the roles of these people. Include persons from the community and other organizations.

THOMAS S. HAMILL, Executive Director was the only full-time professional employee at the time of the first evaluation and remains with the project as Executive Director.

GEORGE M. BAER, an implementation team member, joined the staff on March 15, 1968. In the early development of the project he assisted with administrative details. He became active in the Fenton project and the Taba project upon their organization. At this time he is responsible for the implementation of the Taba program, coordination of activities for the Fenton program and has a leadership responsibility with the behavioral objectives section of our organization.

CHARLES B. MYERS, a social science specialist, joined the staff on June 10, 1968. He has led all the development in the Fenton, Minnesota, Taba, Greater Cleveland, and Senesh projects. This year he has spent most of his time developing and implementing the activities within the Taba program.

EDWARD A. TEICHERT, JR., joined the staff on June 24, 1968 as a language arts specialist. Since that time he has led the activities in language arts and this year has emphasized the Nebraska Language Arts pilot project.

KENDRICK M. McCALL joined the staff on June 24, 1968 and organized the original research activities of the social science project and has worked on research of all activities of the SPEEDIER Project. This year his major emphasis has been micro-teaching, teacher awareness and inter-action analysis inherent in all programs with major emphasis on Nebraska Language Arts. He is alsc responsible for the development of a model management system for SPEEDIER.

CAROLINE SIXSMITH joined the professional staff as library research assistant on July 10, 1968, and has functioned primarily in that capacity ever since.

SUSAN J. BEEDE joined the staff as research assistant on August 19, 1968. In October of this year Miss Beede was transferred to the role of a member of the implementation team and has been responsible for much of the implementation in the Nebraska Language Arts Project.

L. NORMAN ADAMS, an implementation team member, joined the staff on September 3, 1969 as a replacement for a previous implementor. Mr. Adams has been primarily responsible for the implementation of the Greater Cleveland Social Science and Minnesota Social Studies projects.

JOYCE K. FICKES joined the staff on October 27, 1969, with the major responsibility of information disseminating activities.

JUDITH MULLEN joined the staff on October 27, 1969 as a research assistant and audio-visual technician.

PAUL RICE is a part-time employee for the Nebraska Language Arts Curriculum with major responsibilities in linguistics and classroom implementation.

CHARLES HOSTETLER is a part-time employee in the Senesh program, with responsibilities in implementation.

BRENDA PAVONE joined the staff on June 3, 1968 as secretary in charge of the MT/ST.

MARY STECKBECK joined the staff on August 12, 1968, as secretary to the Executive Director, and is also responsible for books and financial accounting of the project.

JOAN SMITH joined the staff as library secretary on February 24, 1969, and has served in that capacity ever since.

BETSY LEE FAIRALL is a clerical secretary responsible for all duplicating for the project - joined the staff on July 7, 1969.

MARY CALDWELL joined the staff on February 24, 1969, works as a secretary and assists with the audio-visual portion of the project. Due to an automobile accident Mary Caldwell is temporarily not working with the project and KATHLEEN POSEY works as her temporary replacement.

BOARD OF DIRECTORS: The SPEEDIER Project Board of Directors is composed of the chief school administrators from each participating school district. The executive officers are Charles Micken, President; William Bolger, Vice-President; C. Daniel Biemesderfer, Secretary; C. Clinton Ruby, Treasurer; Elmer Stevens, President-Elect; and Rev. Francis Taylor, non-public school representative.

Pilot teachers are far too numerous to mention each one. At this time there are more than 600 teachers associated with the SPEEDIER Project in the four counties of Dauphin, Lancaster, Lebanon, and York.

16. Equipment Purchased with Title III Funds

Quantity	Item	Manufacturer & Description
9	Executive Chairs	United
41	Side Chairs	United, Black
1	Judge Chair	Decker, Black
4	Secretary's Chairs	United, Black
8	Conference Desks	Shaw-Walker, Black w/walnut top
1	Executive Desk	Shaw-Walker, Black w/walnut top
2	Secretary's Desks	Shaw-Walker, Black w/textured top
3	Secretary's Desks	Shaw-Walker, w/left extension
1	Secretary's Desk	Shaw-Walker, w/right extension
1	Credenza	Shaw-Walker, Black w/walnut top
1	Worktable	Haskell, Black w/walnut top
3	Worktables (36" x 60")	Virco, Mapleite chrome, legal
1	Worktable	Quaker, textured walnut, chrome legs
1	Worktable (30" x 72")	Virco, folding
2	Worktables	Virco, adjustable
10	Bookcases, Open Front	H.O.N.
8	Filing Cabinets	Cole, 4 drawer. letter size
6	Filing Cabinets	Cole, 4 drawer, legal size
2	Storage Cabinets	H.O.N.
32	Units of Shelving	United
5	Selectric Typewriters	IBM, w/4 additional typeheads
1	Epic 3000	Monroe
1	Duplicating Machine	Gestetner - Model #310
1	Calculator	Monroe
1	Overhead Projector	Bell & Howell (310)
1	400 Reader Printer w/Microfische Adaptor	3M
1	Microfische Reader	Atlantic
1	Tape Recorder	Califone
1	Tape Recorder	Califone, w/foot pedals and headphone (returned for credit)
1	Carousel Slide Projector	Kodak, w/zoom lens
1	Record Player	Califone
1	Film Strip Projector	Bell & Howell
1	Movie Projector - 16mm	Bell & Howell
1	Video Tape Recorder	Ampex (traded in on Panasonic equipment)
1	Monitor Receiver	Motorola - 20"
1	View Finder Camera	GBC
1	Set of Close-Up Adaptors	Bolex
2	Cables - 25 ft.	Coax

Quantity	Item	Manufacturer & Description
1	Lavalier Microphone	Electro-Voice, w/30 foot cord (traded in on new Electro-Voice microphone)
1	Heavy Duty Tote All	Dukane
2	Tripod w/Dolly	Samson
1	Movie Screen	Da-lite
1	Channel Mixer	Wollensak
1	Microphone	Wollensak
1	TV Zoom Lens	Cannon
14	Video Tape Reels	Mimorex
1	Globe	A. J. Nystrom
1	Wall Map - Asia	A. J. Nystrom
1	Wall Map - Africa	A. J. Nystrom
1	Wall Map - Greece	A. J. Nystrom
1	Wall Map - United States	A. J. Nystrom
1	Wall Rack	A. J. Nystrom
2	Transcribing Machines	IBM
3	Dictating Machines	IBM, w/carrying case - cordless
2	Office Valets	Vogel-Peterson, Black w/12 hangers
1	Magazine Rack	Demco
3	Stencil Filing Cabinets	A. B. Dick
1	Master Maker	Gestafax, Jr. MK II Scanner
1	Collater - 8 Bin Electric	Martin Yale
1	Heavy Duty Stapler - Electric	Staplex
20	1/2" One-Hour Video Tapes	Panasonic
1	Carrying Case for Camera	Beseler
2	Portable Video Tape Recorder, 1/2" w/audio dubbing	Panasonic (less trade in of Ampex tape recorder)
1	Shotgun Microphone	Electro-Voice (less trade in of old Electro-Voice microphone)
2	Special Cables	Coax
2	Special Audio Cables	
1	Video Adaptor	NVB22
1	Camera (Model WV033P)	Panasonic
1	Monitor/Receiver	Panasonic - 12"
1	Monitor/Receiver	Panasonic - 13"
1	Microphone	Electro-Voice
1	Twin-Reflex Camera	Yashica, MAT-124
10	Video Tapes	Panasonic - 1/2"
1	Adaptor - WV-960	Panasonic
1	Tape Recorder	Califone 70-TC
1	Video Tape Splicer	Robins TSV100

(as of 11/20/69)

17. Plans for Phasing Out of Project

Very soon we will be entering a time of decision. At this time eight districts have indicated they definitely will assist in financing the SPEEDIER Project in the 1970-1971 school year. Seven school districts have indicated that they plan to help finance it with final approval from their board expected in January. Additional districts are contemplating this activity. Six districts, on the other hand, have indicated that they will not participate in SPEEDIER when federal funds are terminated. It is anticipated that about March 1, 1970, will be the target date for determining whether the project will continue or phase out. The level of activity for the SPEEDIER Project for the 1970-1971 school year will be determined by the funds available for the project. Alterations will be determined as necessary depending upon finances. If sufficient funds are available, the present activities will be continued and activities will be added, particularly reinstating the individualizing instruction portion of the project and adding such fields as mathematics and science. A number of outside districts have indicated their interest in becoming a part of the SPEEDIER Project, e.g., Wilkes-Barre, Tarrytown, New York, Upper Merion. At this time it is about a 70-30 guess that the project will remain in operation, but a 50-50 chance that the project will remain at its present level of activity and a 20-80 possibility that SPEEDIER will expand its activities.